DOCUMENT RESUME

ED 332 296　　　　EA 022 783

AUTHOR	Shafer, Jeffrey E.
TITLE	Evaluation of an Interdisciplinary Model of Middle School Organization: Its Impact on Student Self Esteem and Basic Skill Achievement, School Year 1989-90. Focus on F. B. Leon Guerrero Middle School.
INSTITUTION	Guam Dept. of Education, Agana.
PUB DATE	Jul 90
NOTE	143p.
PUB TYPE	Reports - Descriptive (141) -- Tests/Evaluation Instruments (160)
EDRS PRICE	MF01/PC06 Plus Postage.
DESCRIPTORS	*Basic Skills; *Educational Policy; *Interdisciplinary Approach; Intermediate Grades; Junior High Schools; *Middle Schools; Models; Participative Decision Making; *Program Evaluation; *Self Esteem; Teacher Morale
IDENTIFIERS	*Guam

ABSTRACT

Data collected during the 1989-90 school year reveal that middle schools in Guam exist in name only, with one notable exception. F. B. Leon Guerrero Middle School has implemented an interdisciplinary team model boasting many of the salient features of true middle schools. Leon Guerrero teachers rated the extent their school provided for students' unique social, emotional, academic, and physical needs significantly higher than teachers at other middle schools. Information collected on student self-esteem suggests that Leon Guerrero is doing a creditable job of addressing the social and emotional aspects of student life. Information from the locally constructed Basic SKill Mastery Test in Language Arts/Reading and Mathematics indicates the school is performing adequately in these basic skill areas at the sixth-grade level. Although teacher morale was higher at Guerrero Middle School, morale and satisfaction with worksite conditions at all other middle schools declined. Guerrero stresses participative decision making more than other middle schools. To improve Guam's middle schools, this report recommends that: (1) the director of education immediately convene a high level task force to review the evaluation study and develop action plans; (2) the Territorial Board of Education immediately conduct a detailed policy analysis aimed at incorporating middle school goals and objectives; and (3) policy makers fully support Leon Guerrero's interdisciplinary model. Appendices provide memoranda, sample teacher and student survey instruments, curriculum outlines, and other supportive materials. (20 references) (MLH)

****
*　Reproductions supplied by EDRS are the best that can be made　*
*　from the original document.　*
****

ED332296

GUAM MIDDLE SCHOOLS

Focus on F.B. Leon Guerrero Middle School

Evaluation of an Interdisciplinary Model of Middle School Organization: Its Impact On Student Self Esteem and Basic Skill Achievement

SCHOOL YEAR 1989-90

Jeffrey E. Shafer, Ed.D
Administrator, Research, Planning and Evaluation

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
J. Shafer

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

EA 022 783

Anita A. Sukola
Director of Education
Government of Guam
Department of Education

BEST COPY AVAILABLE

Executive Summary

Middle schools on Guam began operation during school year 1982-83. The decision to reorganize the district into middle schools was administrative in nature; the Territorial Board of Education only endorsed the concept of middle schools. The decision to implement middle schools was not supported by appropriate policy development or standards.

Data collected during school year 1989-90 reveals middle schools on Guam exist largely in name only with one notable exception; F.B. Leon Guerrero has implemented an interdisciplinary team approach that appears to be well on its way to full implementation. Findings of the Evaluation Task Force demonstrate that the F.B. Leon Guerrero model is worthy of emulation by other Guam schools. Should emulation be desired by the district it must be prepared to commit the necessary resources to aide in training staffs and restructuring the remaining middle schools. Once initial training is complete, then on-going training ought to become the norm and the district should actively recruit teachers and administrators with middle school backgrounds and training.

The model implemented at F.B. Leon Guerrero contains many of the salient features of a true middle school. This is not meant to imply that other middle schools on Guam lack features of true middle schools. The Evaluation Task Force observed aspects of true middle schools in most of Guam's middle schools. However, F.B. Leon Guerrero educators rated the degree of implementation of a "true middle school concept" at their school significantly higher than other middle school educators at their schools. F.B. Leon Guerrero teachers also rated the extent their school provided for the unique social, emotional, academic, and physical needs of students significantly higher than middle school teachers at other schools. The information collected on student self esteem supports the notion that F.B. Leon Guerrero Middle School is doing a credible job of addressing the social and emotional aspects of student life; information from the locally constructed Basic Skill Mastery Test in Language Arts/Reading and Mathematics (BSMT) indicates F.B. is doing a credible job in these basic skill areas at the sixth grade level. The fact there was no significant difference between the eighth grade comparison group and the School Year 1989-90 students indicates the transition from elementary to high school type programs may be too abrupt.

While teacher morale and satisfaction with a number of worksite conditions did not change over the 1987 baseline year, morale and satisfaction with a number of worksite conditions at all other middle schools declined. The decline overall was statistically significant.

The F.B. Leon Guerrero administration, to a greater degree than other middle schools, tends to involve staff and students in making decisions which effect them, encourages staff to solve their own problems, and formally meets with professional staff each year to evaluate the programs of the school. F.B. Leon Guerrero administration officials, to a greater degree than other middle schools, tended to view planning as a collaborative process, encouraged parents and community members to provide input into the planning process, and regularly involved or consulted faculty about hiring prospective teachers.

A total of thirty two recommendations, with ten specific to the F.B. Leon Guerrero program, were made by the Evaluation Task Force. However, three major recommendations stand out as being critical if middle schools are to meet the ambitious goals envisioned by the original planners of the reorganization:

It is recommended that:

- The Director of Education immediately convene a high level task force comprised of middle school administrators, curriculum specialists, central office personnel (curriculum and instruction, elementary, secondary, planning and evaluation, special education and inservice training), and teachers to review the results of the evaluation study and devlop action plans that would result in implementation of a true middle school program for all of Guam's middle schools.
- The Territorial Board of Education immediately conduct a detailed policy analysis with an eye towards incorporating policies relative to middle school goals and objectives. As part of this review certification requirements of middle school administrators and teachers need to be revised to reflect the tranisitional requirments of children of this age group.
- Fully support the Interdisciplinary Model used at F.B. Leon Guerrero and formally recognize the model as a legitimate and effective middle school program.

Full implementation of middle schools on Guam will require rethinking old patterns of organization. If middle schools are to meet all the unique needs of the preadolescent, then it will require development of more relevant policy and adoption of standards, renegotiation of pertinent sections of the Board of Education/Guam Federation of Teachers contractual agreement, additional revision of curriculum for the middle school child, revamping teacher and administrator certification requirements, and retraining staff based on the new policies and certification requirements.

Full implementation will also require an aggressive teacher recruitment effort designed to attract teachers with middle school training and experience. It will require collaboration with the University of Guam teacher training programs to insure the standards the Department of Education adopts are addressed by those programs.

Preface

> "By eighth grade a youngster is surrounded by teachers and students with whom he or she has had a chance to build relationships for three years. The school has no cafeteria, so advisors and students eat lunch together in classrooms, which further fosters the building of relationships. The school is organized physically into four academic wings, and each wing has core groups at every grade level, putting sixth-, seventh-, and eighth-graders in close proximity... Shoreham-Wading River (New York) is a school in which team teaching is the norm, experiential learning is a hallmark, cooperative learning is widely practiced, teacher participation in decision making is extensive, and teachers lunching with their students is a daily event. Community service is a part of the curriculum, the school has its own small farm on which students work, youngsters take frequent trips to explore career options, almost all classes are heterogeneously grouped, and students almost never cut school."

This excerpt, from the March 1990 *Phi Delta Kappan* ("A Close Look at a Good Middle School", Maeroff, Gene, pp. 504-511), perhaps exemplifies the kind of vision the planners of Guam's original middle schools had when they set about the task of implementing a sixth through eighth grade middle school program. To what extent has the vision been realized? To what extent do the Guam middle schools address the unique emotional, social, physical, and academic needs of the middle school student? What are the important aspects of middle schools for Guam's students? And, can good middle schools be implemented on Guam within the present budget appropriations of the Guam Legislature?

It is hoped this report will provide answers to these questions and more and that recommendations made by the F.B. Leon Guerrero Evaluation Task Force will provide meaningful insight, if not justification, for improving the education of the preadolescent student.

The Task Force

Acknowledgements

The F.B. Leon Guerrero Middle School Evaluation Task Force consisted of the following individuals:

Dr. Aline Yamashita, Associate Superintendent Curriculum and Instruction

Dr. Anthony Kallingal, Professor of Education, University of Guam

Lourdes Boyd, Associate Superintendent Secondary (acting)

Isabel Montague, Deputy Director of Education (acting)

Dr. Steve Spence, Associate Superintendent Special Education

Dr. Manuel Bartonico, Assistant Principal, Piti Middle School

Judith Won Pat-Borja, Principal, F.B. Leon Guerrero (Co-chairperson)

Dr. Jeff Shafer, Administrator, Research, Planning and Evaluation (Co-chairperson)

Bud Smith, Counselor, Dededo Middle School

Judy Woytowich, Counselor, Inarajan Middle School

Carroll Flores, Teacher, F.B. Leon Guerrero Middle School

Glenna Reyes, Teacher, Untalan Middle School

Sandy Sotto, Teacher, A.I. Johnston Middle School

The author of this report also wishes to acknowledge the excellent support of the following individuals during editing and preparation of the final report: Dr. Aline Yamashita, Judy Woytowich, Dr. Manuel Bartonico, Bud Smith, Caroll Flores, Judy Won Pat-Borja, Sandy Sotto, and Lourdes Boyd. Your insightful comments provided a much needed "breath of fresh air" during the somewhat tedious process of summarizing the various findings and development of recommendations. A special thank you to Dr. Phill Mendel for preparation of Section C, Richard Sorby of the Learning Resources Center for his graphs, and Lois Perez for her excellent work in the design and preparation of the tables in the report and layout of the various instruments used to survey teachers, administrators and students.

And thanks to the teachers, school administrators, and students who took the time to respond to various surveys and inquiries made by the author on behalf of the task force. Your excellent response and honest opinions made the work of the task force much easier than originally anticipated. And finally, thanks to the teachers and administrators at F.B. Leon Guerrero for their willingness to engage in self evaluation activities over the past three years.

Table of Contents

I. Evaluation Plan 1
A. Authority for the Evaluation 1
B. Purposes of the Evaluation 1
C. Evaluation Questions 2
D. Evaluation Techniques 3
II. The Context of Guam Middle Schools 5
A. The Beginning; Background of the Decision 5
B. Purpose of Middle Schools 6
C. Status of Implementation of Middle Schools 9
III. Description of the Guam Middle Schools 12
A. F.B. Leon Guerrero Middle School Model 12
1. Iterdisciplinary Team Teaching Approach 12
2. Flexible Modular Scheduling 13
3. Homebase Program of Advisement 13
4. Mini-exploratory Courses 13
5. Skills Development/Study Hall 13
6. Mainstreamed Special Education 14
7. Extended Reading Opportunities 14
8. Alternative Student Discipline Program 14
9. Professional Growth and Development Workshops 14
10. A "Workaholics" Program for Students At Risk 14
B. Other Guam Middle School Program Descriptions 14
1. Dededo Middle School 16
2. Agueda I. Johnston Middle School 16
3. Luis P. Untalan Middle School 18
4. Piti Middle School 19
5. F.B. Leon Guerrero Middle School 20
6. Inarajan Middle School 22

Table of Contents (Continued

IV. Findings 23

A. Teacher Ratios, Staffing, Per Pupil and Operating Costs 23

1. Teacher Salaries; Base, Per Pupil and Operating Costs 23
2. Per Pupil Operating Costs 25
3. Pupils Per Teacher 25
4. Percent of Teachers With Masters' Degree or Higher 25

B. Survey of Middle School Practices and Procedures 26

1. Description of the Instrument and Sample 26
2. Description of the Results 27
3. Overall Implementation of True Middle School Concepts 27
4. Importance and Existence of Middle School Practices and Ideas 30

Guidance and Advisement 30
Organization for Instruction and Teaching Strategies 32
Curriculum/Integration 33
Transition/Orientation 33
Exploratory and Mini-Courses 34
Intramurals, Athletics, and Extracurricular Activities 34
Administrative Leadership/Decision-Making 35
School Community Relations 36

5. Special Regression Analysis 40
6. School District Discrepancy Analysis 41
    - Guidance and Advisement 42
    - Organization of Instruction 42
    - Curriculum Integration 42
    - Intramurals, Athletics, and Extracurricular Activities 42
    - Administrative Leadership 43
    - Decision Making 43
    - Inservice Training 43
7. Summary of F.B. Leon Guerrero Findings 44

Table of Contents (Continued)

C. Teacher Moral and Work Site Satisfaction 46
1. Design of the Study 46
2. Findings 47
D. Student Outcomes 49
1. Student Attendance Patterns 49
2. Student Self Esteem 49
3. Basic Skill Mastery Test Results 51
4. Student Opinion of Middle Schools 55
V. Conclusions, Summary, and Recommendations 62
A. Conclusions/Discussion 62
Student Attitudes 63
Self Esteem 64
Attendance 64
Basic Skill Achievement 65
Teacher Morale and Satisfaction 66
Implementation Practices 66
Inservice Training 68
Leadership 68
Improving the F.B. Model 68
B. Summary 69
C. Recommendations 70
General Recommendations 70
Recommendations for F.B. Leon Guerrero 72

List of Tables

Table 1 Evaluation Plan 4

Table 2 Middle School Enrollments, Suspensions, and Referrals 15

Table 3 Rank of Middle Schools on Per Pupil Teacher Costs and Other Selected Variables 24

Table 4 Twenty Correlates of Implementation Criteria 28

Table 5 Mean Ratings of the Extent a True Middle Schoo lHas Been Implemented 29

Table 6 Ratings of Middle School Educators on Social, Emotional and Physical Needs 31

Table 7 Administrative Leadership Means and Standard Deviations 37

Table 8 School Community Relations Importance and Existence 39

Table 9 Extent There Was A Change In Worksite Satisfaction 48

Table 10 Average Daily Absentee Rates 50

Table 11 Self Esteem Inventory Sampling Plan 52

Table 12 Adjusted Means of SEI Subscales 52

Table 13 F.B. Leon Guerrero BSMT Language Arts and Math Adjusted Means 54

Table 14 Percentage of Students Believing Middle School Subjects are Too Difficult or Easy 56

Table 15 Percentage of Students Interested and Not Interested In Middle School Subjects 58

Table 16 Percentage of Students Indicating Teachers Give Time in Class to Work on Assignments 59

Table 17 Percent of Students Indicating Satisfaction With Their School 59

Table 18 Percent of Students Who Believe School Rule Enforcement Is About Right 59

Table 19 Percent of Students Indicating Various Significant Adults in the School 60

List of Appencices

Appendix A Survey Instruments A-1
Appendix B F.B. Intramural Rules and Regulations B-1
Appendix C F.B. Retention Committee Guidelines C-1
Appendix D F.B. Mini-exploratory Course List/Homebase Program/Bell Schedule D-1
Appendix E Worksite Satisfaction Graphs E-1
Appendix F F.B. BSMT Predicted Posttest Skill Mastery F-1

I. EVALUATION PLAN

A. Authority for the Evaluation

The Director of Education appointed a task force comprised of various associate superintendents, school administrators, and teachers in September 1990. The task force was to begin the process of evaluating the F.B. Leon Guerrero Middle School interdisciplinary teaching model. Early in its deliberations the task force recognized the need to also consider the other five middle schools since F.B. Leon Guerrero did not exist in a vacuum but, in reality, was part of a system of middle schools governed by the same policy board and administered by the associate superintendent of secondary education. The task force adopted an evaluation plan that also called for participation of all middle schools in the effort with the focus remaining on F.B. Leon Guerrero. To this end representatives from each of the six middle schools on Guam were formally included as task force members.

B. Purposes of the Evaluation

The current evaluation effort focuses on the F.B. Leon Guerrero program as it has evolved over the past four school years (F.B. Leon Guerrero was originally authorized to pilot its model beginning school year 1985-86). The task force also recommended that the other five middle schools be reviewed with an eye towards identifying practices at those schools. The other middle schools will serve, where appropriate, as comparison schools with respect to outcomes. Thus the first major purpose of the evaluation is to document and describe:

1. Guam Middle School Practices and Conditions

This effort will describe current practices and conditions in Guam middls schools. Costs, absentee and suspension rates, teacher backgrounds, and other progrmmatic details will be described. A second major purpose of the evaluation is to identify:

2. Important Practices in Guam Middle Schools

It is perhaps interesting to note that Guam possesses no officially adopted middle school standards or goals. A cursory review of Board of Education policies conducted during the preparation of the evaluation plan revealed a paucity of policies dealing with middle schools; policies that do exist are simply old junior high school policies that have been revised to read "middle school" in place of "junior high school". A detailed policy evaluation is beyond the scope of the current evalution effort. It is anticipated, however, that many of the findings and recommendations will contain policy implications. Where appropriate, policy implications will be noted.

There has been one officially sanctioned evaluation of the Guam middle schools conducted by the Division of Research, Planning and Evaluation in January 1984. F.B. Leon Guerrero faculty and staff have, for the past three school years, also conducted internal evaluations of the school.

Outcomes are also important for an evaluation effort. Several philosophical statements in the original *Reorganization Plan* and the F.B. Leon Guerrero middle school handbook imply expectations about student outcomes in the affective and cognitive domains; teacher attitudes and morale are also mentioned. A third, and final, major purpose of the evaluation is to describe:

3. Student Outcomes , Teacher Attitudes, and Morale

The planners of the original middle school reorganization believed middle schools should have a positive impact on how students felt about their school and themselves. Therefore, the effect the middle school program has on student affective (attitudes toward school, attendance, and self esteem/social adjustment) and cognitive outcomes, teacher attitudes and morale will also be assessed in the evaluation effort..

It is anticipated evaluation results will be used to develop district middle school standards and practices. Results will be used to inform policy development and will have implications for certification, future Board-Union contracts, and middle school budgets.

C. Evaluation Questions

Several questions are suggeseted by the foregoing purposes and will be addressed by this evaluation. These questions are listed below and include:

- How do the Guam middle schools compare with each other relative to teacher costs, operating costs, and other characteristics?
- What impact has the F.B. Leon Guerrero Interdisciplinary Model had on student attitudes, attendance, self esteem and achievement? How does this compare to other middle schools?
- What is the level of morale of F.B. Leon Guerrero teachers and how does this compare with other middle schools?
- How satisfied are F.B. Leon Guerrero teachers with conditions at their school; how does this compare with satisfaction levels at other middle schools?

- Which practices make important and unique contributions to the implementation of a true middle school concept for Guam publis schools?

D. Evaluation Techniques

Several techniques for evaluating the F.B. Leon Guerrero Middle School Interdisciplinary Pilot Program were used. Questionnaires, record reviews, and cognitive and affective tests were utilized in the evaluation effort. Administrators, teachers, and students, were surveyed relative to their perceptions of the middle schools and attitudes of students and teachers.

Schools themselves provided information on salient features of their own programs and Department of Education statitical reports from school principals were scrutinized as were results from the Basic Skill Mastery Test in language arts and mathematics. Prinicpals were asked to complete an extensive questionnaire designed to describe salient aspects and practices of the programs at their schools. A survey was also developed designed to identify ideal middle school practices and the degree to which those practices have been implemented in the Guam middle schools. Items used on the survey were generated from a review of current literature [ASCD, Curriculum Update, November 1988 (1) and Carnegie Council on Adolescent Development, June 1989 (2)].

Table I presents a management matrix of the evaluation plan, complete with person responsible, timeline, instrumentation and data analysis techniques to be used. Copies of the instruments used in the evaluation effort may be viewed in Appendix A.

Table 1
Evaluation Plan

Outcome/Activity	Instrument	Administration Date	Analysis	Completion Date	Responsible Person
1. Faculty morale/involvement	Purdue Teacher Opinionaire	3/21-4/6/90	Item means, s.d., "t"-test subscales, CB & others.	June 1, 1990	Phill Mendel
2. Student Self Esteem (N=30)	Coopersmith SEI	5/90	Handscore, subscale scores s.d., means t-test FB & others	June 1, 1990	Caroll Flores
3. Student Achievement	BSMT Grade 6 & 8; 1983-84 = Base Year; 1989-90 BSMT Treatment	9/89 & 4/23/90	Mean Skills Mastered pre-post expectancies using regression/ANCOVA	July 1, 1990	Jeff Shafer
	SRA Grade 7 1983-84 = Base Year	9/89	NCE, compare with base line year 1984-85 trends beginning 85-86-present	September 1990	In Progress/J. Shafer
4. Parent/Community Involvement	Describe at each school, survey sample of parents from each school	5/21-5/25		September 1990	In Progress/.J Shafer
5. Descriptions of all middle schools			Case Study/Review Comparative Analysis	July 1, 1990	School Principal
6. Document practices	Survey of Teachers & Administrators (sample)	4/90	Frequency distribution cross-tabulations correlations w/ criterion variable	June 15, 1990	Jeff Shafer
7. Describe aspects Guam educators believe to be important	Survey of Teachers & Administrators (sample)	4/90	Frequency distribution cross-tabulations correlations w/ criterion variable	June 15, 1990	Jeff Shafer
8. Status of recommendations report	Survey of Teachers & Administrators	4/90	Means & S.D. of items	June 13, 1990	Jeff Shafer
9. Cost comparisons comparability type study P/T ratios, etc.	File review		Ratios, per pupil costs, etc.	Feb. 1990	Jeff Shafer
10. Student Attendance (ADA/ADM from RPE)	Records review		ADA & ADM figures; base year 1983-84/Use 1984-1989 ADA/ADM	July 1990	Jeff Shafer
11. Attitudes toward school. Need to develop or I.D. school/student instrument	Survey of students	5/90	Means and S.D., frequency distributions	June 1, 1990	Task Force
12. Parent Perceptions of middle schools. Need to develop or I.D. survey	Proctored (?) survey	5/90	Means and S.D., frequency distributions	September 1990	In Progress/J. Shafer
13. Final Report Preparation			Narrative	July 30, 1990	Jeff Shafer
14. Develop Outline		3/28/90		April 2, 1990	Task Force

II. THE CONTEXT OF GUAM MIDDLE SCHOOLS

A. The Beginning; Background of the Decision

It was a passably routine school beginning August 1982; elementary children, with few exceptions, boarded buses. As usual high school students snatched what ever ride they could - be it bus, parents, or friends with cars. However, something was different; something had happened to the Guam schools during the summer vacation. Five high schools opened where two existed before; three of the six junior high schools had been transformed into high schools and three elementary schools had joined Dededo, Johnston, and Untalan as 6th - 8th grade middle schools. Ninth grade students were now housed at each of the five high schools. Instead of 26 elementary schools there were now twenty four.

Two hundred fifty teachers, new to the 6th, 7th and 8th grade, were formally introduced to middle schools in workshops held at Simon Sanchez High School August 24-25, 1982. A group of educators from California school districts and the University of Southern California, under the leadership of Dr. John Stallings, conducted these workshops. The workshops were designed to give middle school teachers basic information about middle school philosophy, organization, and characteristics of children aged 10-14 years of age. Administrators and DOE Central Office administrators were provided similar, but differently focused, training during the week of August 16-21, 1982. In general the workshops were well received and viewed as relevant and useful by both groups. Both groups desired additional training.

Planners of the reorganization implemented middle schools and opened three new high schools in what seemed like overnight fashion. However, planning had been going on for nearly a year prior to the implementation. A new Territorial Board of Education policy (3) increased graduation credits and included the ninth grade credits as part of the total number of credits students needed in order to graduate. This provided major impetus for the change and prompted, then Director of Education, Katherine B. Aguon to convene a committee of principals (Facilities Planning Committee) to study facility needs and the feasibility of converting the George Washington and John F. Kennedy High Schools into four year institutions. This Committee reported to the Director that existing high schools could not accommodate all ninth grade students.

In the report the committee's chairperson (4) also outlined the Planning Committee's objectives and reported an emerging trend: southern and central residents were migrating to the northern part of the island to take advantage of economical housing being built there; many families moved to the north to be closer to jobs directly or indirectly related to the tourist industry. This trend was viewed as being partially responsible for the overcrowded conditions in northern schools and under utilization of some central and many southern schools. The Committee presented information that showed nearly three fourths of the elementary schools in 1981-82 were less than 85% utilized. Unequal distribution of enrollments across the district were pointed out.

The Director of Education, partly in response to Board of Education changes in graduation requirements, overcrowded schools and a desire to meet the unique physical and psychological needs of preadolescent and early adolescent children, asked the Committee to develop alternative plans that would address these concerns without building new schools or classrooms. As 1982 began several plans of action were drafted by the Committee and presented to the Board of Education for consideration ⁽⁵⁾. At the February 25, 1982 meeting, the Board of Education endorsed the idea of converting junior high schools to middle schools and adding three high schools. The final stages in the process of reorganization that was implemented beginning school year 1982-83 began.

In March 1982 the Director of Education officially changed the name of the Facilities Planning Committee to *Reorganization Central Planning Committee*. The newly named committee had responsibility for overseeing various subcommittees engaged in finalizing implementation plans, coordinating standardization of registration materials and procedures, and ensuring continuity in the middle and high school curriculum and course offerings. The implementation plan developed by the Reorganization Committee contained tasks, timelines for completion and persons responsible for each aspect of the conversion to middle schools. The Committee realized that timing was critical if schools were to open on time in August 1982.

B. Purpose of Middle Schools

The original intent of the junior high school was to allow for a smooth transition from elementary to senior high school. Over the years, however, this purpose had been put out of focus; an organizational pattern duplicating that found in the comprehensive high school became the norm for junior high schools. Like many educators in other United States communities, educational leaders on Guam had become dissatisfied with the high school "feel" of their junior high schools.

Another problem the Guam school system faced was unequal distribution of enrollments across elementary schools and a self imposed Government of Guam financial austerity program that dictated *no funds for capital outlay or construction* . In addition, the two high schools and some junior highs had become unmangeably large (Dededo Junior high school, at one time, boasted of an enrollment of nearly 1,700 students, while JFK and GW high schools, originally designed for 1,500 and 1,800 students, respectively, had enrollments of 2,000 and 2,200). It was believed that by organizing into middle schools, and converting three junior high schools to high schools, JFK and GW High Schools could be reduced to a size that approached their original design capacity, even after the ninth grade was incorporated into the high school schedule.

The rationale for Guam's middle school organization was based on the nature of the youngsters it intended to serve. Educational psychologists inform us that the period from ten to fourteen is unique; it is a period of great change. Human relationships become the primary focus of these children. Academics, while important to these students, take a back seat to physical, social, and emotional development. Significant increases in brain growth also occur at about this time. To say that these children experience a measured degree of "disequilibrium", to borrow a Piagetian term, would be an understatement. More and more educators had come to the conclusion that middle school children must be valued in the school for what they are: preadolescents emerging from childhood in varying degrees and rates; sometimes awkward and insecure, often amazed by newly developing powers and frequently in need of close supervision and guidance.

Middle school researchers (6) report that school organizations of grades 6-8 provide the key characteristics or program features commonly advocated as most appropriate to the needs of students aged 10-14. Researchers also note that simply placing grades 6-8 in a single building does not assure that the program characteristics suggested for youth of this age will be present. Many schools with grades 6-8 continue to be more similar to than different from junior high schools (Cawelti, 1988). Key leaders (7) in the field of middle school education have identified essential features for schools serving youths aged 10-14. These include guidance programs designed for each student that assures familiarity and continuity in providing advice on academic, personal, and social matters; an emphasis on a curriculum that provides a smooth transition between elementary and high school by orienting students and providing close articulation and coordination of learning experiences; block time scheduling/interdisciplinary teams; a variety of teaching strategies that have been demonstrated to be successful with this age group (independent study, cooperative learning, inquiry teaching, direct instruction, teaching/learning styles strategies); a wide range of short term (usually 4-6 weeks) exploratory or elective courses for students to develop their interests; a chance for all students to participate in intramural athletics; a core curriculum that emphasizes basic skills children will need for future learning - mastery learning in the areas of language, social studies, science and mathematics.

The original Reorganization Plan (8) had the following to say about the envisioned Guam middle school program:

- ...the middle school must take into consideration characteristics of the preadolescent to early adolescent youngster and provide for these unique needs through total faculty involvement.
- ...guidance counselors must play a key role in meeting the individual needs of these students. Counselors must work with teachers to help gather and interpret important information about youngsters. The guidance counselor becomes the primary resource person who must

provide teachers with information about individual youngsters and constantly assist teachers to be aware of what each child is experiencing during this critical period of physical/psychological growth and development.

- ...the middle school faculty should be comprised of teachers who have elementary training and those who have secondary preparation...a great deal of emphasis should be placed on developing basic learning skills...The skills teaching portion of the middle school should not be identified with only one subject area, but should be interrelated and reinforced through the various academic disciplines.

According to the planners, a distinct advantage of the middle school would be less fragmented course offerings. The planners envisioned that a great deal of time would be devoted to mastering basic skills in language arts, social studies, mathematics, science and physical education. These ideas were consistent with current thought on middle school organization.

Another feature Department planners intended to build into the reorganization was that of "community or neighborhood schools". By 1974 several new schools had been constructed, namely M.U. Lujan, Finegayan, and F.B. Leon Guerrero elementary schools, and Simon Sanchez Junior High. Not all of these schools were built near dense population centers; children attending these schools were assigned as a result of attendance area "gerrymandering". Some children were bused to these new schools even though another school was right next door to them. By 1978 the population shift towards the northern end of the island was well documented. There was also an increase in immigration from both Micronesia and the Philippines; this caused population surges in Mangilao and Dededo. The Reorganization Committee endeavored to create school districts that would allow children to attend the school nearest their homes.

Not only did the neighborhood school idea sound logical and educationally sound, but it appeared to offer the Government of Guam potential cost savings on school bus operations.(9) Five "feeder" systems, with several K-5 elementary schools feeding a middle school of grades 6-8, which in turn fed a high school of grades 9-12, were created. This feature provided for all three types of schools to be located within the same geographic area. This was viewed by the planners as essential to a true "neighborhood" school system, K-12. For the most part this feature was implemented with the exception of the Yona, Baza Gardens, and Windward Hills attendance areas. Children from these areas are permitted to attend either G.W. High School or Inarajan High School. The original intent of the Board of Education was to allow children from these areas one to two years to attend either school after which the children from these areas would begin to attend Inarajan High School. Planners of the reorganization (10) viewed this as critical to the success of Inarajan High School's curricular and extra curricular offerings; without proper enrollment levels, Inarajan High School would have difficulty offering a full slate of courses and would not be able to fully participate in various extra curricular activities, including athletics.(11) Children new to high school in these areas were supposed to begin their high school careers on Guam at Inarajan. This has not happened. As recently as August 1988, Yona residents and several politicians were successful at convincing the Territorial Board of Education to retain those attendance privileges for students from those areas.

C. Status of Implementation of Middle Schools

Teachers and administrators, after the initial orientation workshops of August 1982, settled into the middle schools rather quickly. During the school year principals from Inarajan, Johnston and F.B. Leon Guerrero (Dr. Keith Taton, Joseph Quitugua and Ronald Pinkham were the first and only administrators to spend time in stateside middle schools) travelled to California to spend a month observing middle schools in operation. The plan was to enable the other middle school principals to do the same, however the trip for the second group of principals did not occur.

In January 1983, four months after middle schools opened, an implementation evaluation Task Force, comprised of Department of Education administrators and teachers, a Guam Federation of Teachers member, community persons, and a University of Guam faculty member, was organized by Gloria Nelson, newly appointed Director of Education. Nelson had publicly committed the Department of Education to evaluating the middle schools and if necessary to "get rid of them if they were not doing what they were intended to do". (12)

The Task Force was directed to evaluate the middle school system and offer suggestions for improving this system. Two general and wide ranging questions about the middle school system were formulated by the task force:

1. To what extent did the originally intended effects of the middle school occur during the first year of implementation (was the middle school concept implemented as intended) and

2. What aspects of middle schools should be continued and how can middle schools be improved?

The Task Force identified six broad areas of inquiry. These areas included:

1. Scheduling and related issues
2. Facilities issues
3. Curriculum and middle school program structure
4. Student behaviorial issues
5. Student affect, school climate and school community relations, and
6. Inservice training and other staff-related issues.

Many of the major intended effects of the shift from a junior high to a middle school grade structure were specified within the original *Reorganization Plan.*(13) These included the following:

a. Six middle schools should be created,

b. Facilities modifications should serve to upgrade former elementary schools to middle schools,

c. Middle schools should assist the transition from pre-adolescence to adolescence. They should be transitional schools, to bring abouta more continuous or articulated K-12 educational program with 6th graders having a more elementary-style program and 8th graders utilizing a more junior high-style, scheduled-class program.

d. Faculty and support staff should work together as a team to meet the unique physical, psychological and learning needs of the middle school student.

e. Student behavior-related problems should begin to decline if a caring, uncrowded environment is provided for students at the middle school.

f. New, innovative programs and special programs should be somewhat easier to implement,

g. Integration of course offerings should be emphasized, with basic concepts as well as content knowledge to be more easily interrelated across subject areas.

h. The interscholastic athletic program was to be replaced by school wide intramural programs.

i. Specific courses and schedules were outlined by the reorganization documents. These included:

Period	Grade Six	Grade Seven	Grade Eight
1	Basics (L.A. Reading,	Math	Language Arts
2	Math, Social Studies	Science	Science
3	Science Block	Social Studies	Social Studies
4		Art/Music	Math
5	Art/Music	L. Arts/Reading	PE
6	PE/ Health	Block	4-9 Week Exploratory Block

The *Middle School Appraisal, Final Report* listed fourteen (p.11) results from the teacher and administrator survey. These results indicated respondents favored shorter class periods (institute a 7 period day), creation of a combination homeroom/first period class, implementation of a two period language arts block at all grade levels, physical education every year, provide for more gradual transition from 6th grade to departmentalized 8th grade, semester long exploratory courses and electives for 8th graders, year-long science and social studies courses for sixth graders, a band program and a semester course in family living for the eighth grade to address careers, sex education, decision-making, budgeting, parenting, taxes, and insurance.(14)

The intended effects outlined above while impressive, have not been formally adopted by the Territorial Board of Education. No official statement relating to middle school standards could be found. There appears to be no district-wide standards for middle schools. Board of Education policies specifically targeting the middle years (grades 6 - 8) are minimal, non-existent or consist of re-written junior high school policies, where the term "middle school" is simply substituted for the term "junior high" (i.e. Board of Education policy 339). The Board of Education, February 1982, endorsed the concept of middle schools; the subsequent implementation was an administrative decision carried out by, then Director of Education, Katherine B. Aguon.

No Board of Education adopted middle school objectives could be located. Certification policies of the Board of Education do not specifically address middle school certification; elementary, secondary, special education and vocational education are mentioned as discrete levels. Of 108 policies reviewed (excluding DOE Personnel Rules and Regulations) two policies specifically mention middle schools; at least one policy still refers to junior high schools. Of those 108 Board of Education policies 78% (N = 84) were adopted prior to the implementation of middle schools. Of the policies enacted subsequent to middle school implementation, 58% (N = 14) were enacted or amended after 1987. The extensive policy revision begun under Director Aguon in October 1982 was interrupted by a change in administration. (15) The contract agreement between the Board of Education and the Guam Federation of Teachers,(16) adopted November 1988, includes middle schools as part of secondary schools (Sec. V.B.7.b, p.13).

In April 1982 members of the Reorganization Committee expressed concern about a lack of agreement among various DOE Division Heads on the issue of middle school principal certification requirements. It was the Committee's contention that the goal of installing the middle school as a true transition institution from elementary to high school was critical. It was reasoned that administrators in these schools should represent both elementary and secondary experience. The issue has not been totally resolved to this day; middle school principals and assistant principals are either former junior high or high school administrators with little or no formal elementary experience or university course work in elementary education. During School Year 1989-90 middle school openings were still being filled by former high school administrators.

III. DESCRIPTION OF THE GUAM MIDDLE SCHOOLS

A. F.B. Leon Guerrero Middle School Model

The interdisciplinary, flexible, modular, scheduling program implemented at F.B. Leon Guerrero Middle School beginning School Year 1985-86 came about as a result of a perceived need, by the faculty, staff, and Department of Education Central Administration, to provide an educational program that met the total needs of students. The F.B. Leon Guerrero pilot program included several unique features that differentiated it from the other Guam middle school programs. These included the following:

- 1. Interdisciplinary team teaching
- 2. Flexible modular scheduling that included a 7 period day
- 3. Homebase programs of advisement
- 4. Mini-exploratory courses
- 5. Skills development/study hall
- 6. Mainstreamed special education
- 7. Extended reading opportunities for 8th grade students
- 8. Student discipline program that included after school detention for academics or work programs
- 9. Emphasis on professional growth and development
- 10. A "workaholics" program for students at risk

The rationale for including the above features was based on the training provided by Elliott Merenbloom and the research that faculty and staff conducted on middle schools. The ten aspects of the program are briefly discussed below.

1. Interdisciplinary Team Teaching Approach

Teachers from different content areas are assigned to work together with a common group of children in order to address the needs of the group. Teachers and students form a team. Subjects taught by the team include the core subjects of math, science, social studies, language arts, and reading. The team is provided a common planning period where all teachers of the team cooperatively discuss student needs and plan for addressing those needs. Counselors randomly assign students to teams; teachers on the teams also take on roles traditionally the purview of the guidance counselor (registration and scheduling). Teachers, themselves, opted to implement an extended day from 8:00 a.m. through 3:00 p.m. By extending the school day F.B. Leon Guerrero was able to add a seventh period to its schedule so teachers could have a team planning period as well as a personal planning period. Addition of the seventh period created a need for curriculum revision and the addition of courses students could take while teachers were in their team planning group. For the sixth grade students, science and social studies became year-long courses; 7th grade students were offered a full year of Physical Education and 8th grade students were given a basal reading class for everyone. Teachers in the school still teach five academic periods. No bells ring at F.B. since teachers on a team have control over class length and can change schedules as lessons dictate. On Monday, Wednesday, and Friday classes are 45 minutes in length and on Tuesdays and Thursdays classes are 50 minutes in length.

2. Flexible Modular Scheduling

Blocks of instructional time, which may be somewhat shorter than the traditional school period, are used to provide for varying needs of students and team members. Modular scheduling enables lengthening or shortening of instructional time as the situation may require.

3. Homebase Program of Advisement

The homebase program is similar to a group counseling session where a teacher assumes the role of an advisor to an assigned group of students. At F.B. Leon Guerrero students meet with their homebase group twice a week for 25 minutes each time. The focus is generally on meeting the social and emotional needs of students. Problem solving and decision-making skills are taught. Two teachers from the fine arts are added to the academic team as "satellite" teachers to make the groups smaller and more manageable.

4. Mini-exploratory Courses

Mini-exploratory courses last 4 to five weeks, are ungraded, and provided to meet the various interests and needs of students. Teachers draw mainly from their own talents and experiences in teaching the mini-courses. Courses may have an academic or recreational focus. Sports, foreign languages, cooking, dance, arts and crafts, photography, calligraphy, rocketry and young astronauts are some of the courses offered twice a week for one hour during the 4 to 5 week timeframe.

5. Skills Development/Study Hall

Study hall is scheduled once a week for an hour. Teachers may provide instruction on specific skills such as reading or writing. Tutoring and quiet sessions are also used so students can complete homework or other assignments. This time is also used to pull students out for band, choir, Academic Challenge Bowl practice, and club meetings.

6. Mainstreamed Special Education

All students who were once served in a Special Education resource room have been mainstreamed into a regular classroom setting all day with support services provided by the in-school Consulting Resource Teacher (CRT), instructional aides to assist the teachers, and other support service personnel. The teachers and CRT work closely to monitor student progress; goals and objectives are developed cooperatively and strategies for regular classroom instruction are modified to meet special student needs.

7. Extended Reading Oppportunities for 8th Grade Students

F.B. Leon Guerrero has added a separate reading period for all 8th grade students.

8. Alternative Student Discipline Program

The school offers alternative discipline programs for academic failure and repeated, minor classroom infractions. Students are placed on after-school work detention for repeated classroom infractions or academic after-school detention for academic failure.

9. Professional Growth and Development Workshops

Monthly workshops are given that now last for a full day (half day workshops were used up through School Year 1988-89). On these days students do not report to school. School personnel are required to attend the workshops. Topics offered are based on school and faculty needs.

10. A "Workaholics" Program for Students At Risk.

Students at risk complete minor repair and maintenance work on the school building under the supervision of a faculty advisor. The "at risk" students are identified by teachers, counselors, and the administration. These students have been identified as having problems with the following: attendance, behavior, academics, or low self-esteem.

B. Other Guam Middle School Program Descriptions

Data reported in the following sections may be viewed in **Table 2** Data originated from two sources: the school principal and, in the case of the Discipline Advisory Committee meetings (DAC's), Pupil Personnel Services log books for the past four years were reviewed.

Table 2

Middle School Enrollments, Suspensions, & Referrals

School	Enrollment Sept. 30, 1988	Counselor:Pupils	Percent Counselor Certification	Percent Elementary Certification	Percent Secondary Certification	Percent Dual Certification	4-Year Suspension Rate/1000 Enrolled	4-Year Suspension Rate 1000 Referrals/1990	Students Retained/1000 Enrolled/1990	4-Year DAC Average
Untalan	953	316:1	3/3 100%	32	45	23	184	249	11.5	6.3
Piti	779	260:1	2/3 66%	44	56	0	228	315	25.7	3.3
Johnston	1,062	266:1	4/4 100%	36	59	5	298	235	0	10.0
Dededo	1,421	284:1	5/5 100%	27	60	2	443	322	9.8	23.3
Inarajan*	437	437:1	1/1 100%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FBLG	970	323:1	3/3 100%	29	65	6	206	250	15.5	4.5

*Data not available from Inarajan at time of publication.

1. *Dededo Middle School* enrolls 1,421 students in grades six through eighth. Of these, 38.9% are Chamorro and 47.3% are Filipino. Slightly over 7% of the enrollment is Caucasian. Dededo Middle School is located in the village of Dededo and employs five fully certified guidance counselors. This represents a pupil to guidance counselor ratio of 284:1. Approximately 26% of Dededo teachers hold elementary certification and 71% hold secondary certification. Two teachers hold both elementary and secondary certification.

Dededo's mean four year suspension rate for School Years 1989-90 was found to be 443 students suspended per thousand student enrollment. During 1989-90, Dededo school administrators suspended 322 students per each 1000 students referred to the office for disciplinary reasons. This rate was lower than the four year average rate of 443 per 1000 referrals.

Physical education is offered to about 95% of the school's sixth graders and 80% of the school's eighth graders. Physical Education is taken for a half year by sixth graders and for a full year by eighth grade students. The courses offered include softball, soccer, basketball, gymnastics, bowling, badminton, roller ball, and track and field. Courses are offered alternately as per department vote each quarter.

Dededo's intramural program is run by the P.E. Department on a voluntary basis during lunchtime. One coordinator is given an extra preparation period. Competitions take place during lunch and each quarter different sports are emphasized.

There is a retention committee at Dededo made up of parents, student, counselor, principal, and teachers. When a student has two or more failures a parental meeting is called as per Board-Union Contract. Decisions are based contract guidelines. Last school year Dededo retained 14 students or 9.8 students per thousand students enrolled.

Dededo follows the referral process as outlined in the DOE Student Discipline Procedures handbook. Minor offenses require four documentations before they can be referred to the principal's office. Major offenses are referred immediatly to the office. According to Pupil Personnel Services records Dededo held 13 Discipline Advisory Council (DAC) meetings during the past school year. During 1988-89 Dededo held 23 DAC meetings. Dededo's four year average (1985-86 thru 1989-90) was computed to be 23.5 DAC meetings per year.

The Dededo administration indicated they needed adequate facilities, and funds as well as better teacher support in order to offer a system of mini-courses. Career education, agricultural science and ROTC were mentioned as three exploratory courses the principal would like to see offered next year.

2. *Agueda I. Johnston Middle School* enrolled 1,062 in grades six through eight. Of these 74.1% are Chamorro and 16.9% are Filipino. Almost 51% of the students are males. Johnston is located in the village of Ordot/Chalan Pago and employs

four fully certified guidance counselors. This represents a student to guidance counselor ratio of 266:1. Approximately 36% (N=26) of Johnston teachers hold elementary certification. Forty three, or nearly 54%, hold secondary certification. Four or slightly over 5% hold dual certification.

Johnston has a four year mean suspenion rate of 298 students suspended per thousand students enrolled. The four year suspension per thousand referrals was found to be 235. In other words, Johnston school administrators, over the past four years suspended an average of 235 students for every 1000 students referred to the office for disciplinary reasons.

Physical education is offered to all 6th grade students and about 90% of the eighth grade at Johnston Middle School. Sixth graders take one semester P.E. and one semester health. Johnston's program for sixth graders begins with the APHRD Youth Fitness Test. Throughout the semester students do routine stretching and calisthenics along with running to further their strength and overall physical fitness. Most of the 6th grade students are also instructed on basic skills and rules of volleyball, soccer, basketball, softball, kickball, dodgeball, wiffle ball and indoor soccer. The eighth grade program runs for the entire school year. Eighth graders are also tested with the APHRD Youth Fitness Test. Extensions of the sixth grade program include fundamental rules, and game psychology of each sport. Eighth graders compete among themselves and other eighth grade classes, where teamwork and fairplay are stressed. The eighth grade program also has an end of the year assessment and counseling component, where all students are measured on improvement with the APHRD and their strenghts and weaknesses discussed. Individuals with above average skills in a given area are told what they could do in the future.

Johnston's intramural program has a sixth grade component (volleyball and softball) which competed during lunchtime this past school year. The sixth grade program had mainly males participating in softball while both males and females participated in volleyball. The eighth grade component offered both boys and girls opportunities to participate in basketball, volleyball, and softball. The turnout for each numbered between 35 and 75. Round robin tournaments were set up to enable all teams a chance to comptete against each other.

Johnston administrators indicate each case for retention or promotion is considered on an individual basis. Students, parents, teachers, counselors and the principal are involved in the process. Retention or promotion criteria include the student's age, academic potential and ability, and behavior. Also considered is the effect the action would have on the student's self-image and the overall climate of the school. Over the past four school years Johnston has retained only 3 students (1983-84). There were no students retained last school year and none this school year.

Discipline procedures are based on the philosophy that teachers should take the first steps to resolve minor classroom problems. The teacher is reponsbible for documenting minor classroom problems and steps taken to resolve them. The discovery that 90% of the discipline referrals were being made by 20% of the teachers prompted the school principal to work with those he feels need inservice training on classroom management. Johnston held only two DAC meetings last school year. During school year 1988-89 Johnston held a total of 13 DAC meetings. The four year average was computed to be 10.0 DAC meetings per year.

No suggestions for exploratory courses were given by Johnston school administrators, nor were any ideas presented as to what it would take to implement a full compliment of mini-courses.

Johnston's guidance and counseling program is fairly traditional in that individual and small group counseling in academic, social and personal aspects are provided. Counselors also appear to play a major role in placement activities (language arts and mathematics) as well as scheduling students into appropriate classes.

3. *Luis P. Untalan Middle School* enrolls slightly over 950 students in grades six through eight. Of these, 62.6% are Chamorro and 18.7% are Filipino. About 8% of the students at Untalan are from the Freely Associated States of Micronesia. Fifty two percent of the enrollment are males. Untalan is located in the village of Barrigada and employs three fully certificated guidance counselors. This represents a student to guidance counselor ratio of 316:1. Approximately 32% (N=19) of Untalan teachers hold elementary certification. Fourteen or twenty three percent of the teachers at Untalan hold dual elementary-secondary certification. Forty four percent of the teachers (N=27) at Untalan hold secondary teaching certificates.

Untalan has a four year mean suspension rate of 184 students suspended per thousand student enrollment. The School Year 1989-90 suspension per thousand referrals was found to be 249. In other words, Untalan school administrators, during the current school year, suspended 249 students per each 1000 students referred to the office for disciplinary reasons. Calculation of a four year average was not possible due to missing data.

Physical education is offered to 6th and 8th graders throughout the school. Untalan administration estimates that about 92% of the sixth grade is enrolled in P.E. while only about 6% of the 8th grades is enrolled. P.E. is also made available to students housed in self contained special education classrooms. The program is designed to enhance the physical and psychologocal "wellness" of students. Four basic sports are offered and include physical fitness, basketball, softball, and soccer.

Untalan's intramural program has a goal of providing an opportunity for 20% of the school to participate in intramural activities. This goal was more than met this school year since close to 40% of the enrollment participated in these types of activities. Untalan officials point to a lack of funding and lack of teaching faculty support of the program as being problematic. The success of this year's program was the result of six volunteers who gave up their lunch hours to run the intramural program.

Untalan administrators cite Board of Education Policy 339 and 348 as governing the promotion and retention of students. A student must have a final average of no lower than D- to be promoted; a student may not be promoted if s/he fails two "solids" (language arts, mathematics, social studies, science, or P.E./Health). All requests for retention or promotion are referred to a committee composed of the teacher, the parent, the principal, and a guidance counselor. Double retention must be referred to a school psychologist for evalution and recommendations. Double promotions requires approval by the Director of Education. Untalan retained 11 students in 1990; 11 in 1988-89 and 6 in 1987-88.

Untalan teachers and staff follow the written Department of Education Student Discipline Procedures in all aspects of student referral and dicsipline. Both out-of-school and in school suspensions are used by the administration. Last year Untalan held 9 DAC meetings; the year before 16 DAC meetings were held. The four year average was computed to be 6.3 DAC meetings per year.

Untalan has attempted to offer short-term, mini courses, however, the administrtion cites the Board-Union contract as a hindrance to full implementation. The school's administration believes commitment from all of the teachers to the concept of mini courses is needed along with modifications to the Board-Union Contract before they become a part of the middle school program at Untalan.

The administration listed three exploratory courses it would like to see offered at Untalan next school year: Home Economics, Industrial Arts, and Career Education/Computers were listed.

Untalan administrators listed nine major activities of the guidance and counseling program; all appeared to be traditional functions. Counselors at Untalan are expected to assist in the orientation of new students, registration and scheduling of students, test administration, transcript preparation, records maintenance, and selection of students for awards as well as the more traditional guidance and counseling functions of academic, career, social, and personal counseling in small gorup and individual settings.

4. *Piti Middle School* enrolls about 780 students in grades six through eight. Of these, 56.6% are Chamorro and 24.8% are Filipino. About 14.8% are Caucasian or white. Females make up 50.4% of the total enrollment. Piti is located in the village of Piti and employs 3 full time guidance counselors, of which two are fully certified. This represents a student to guidance counselor ratioo of 260:1. Approximately 44% (N=19) of Piti teachers hold elementary certification. No teacher at Piti holds both elementary and secondary certification. Fifty six percent (N=24) of Piti's techers hold secondary certification.

Piti has a four year mean suspension rate of 228 students per thousand students enrolled. The School Year 1989-90 suspension rate per thousand referrals was found to be 315. In other words, Piti administrators, during the current school year suspended 315 students per each 1000 students referred to the office for disciplinary reasons. Computation of a four year average was not possible due to missing data.

Physical education is offered to sixth and eighth grades students throughout the school. Piti administrators estimate all sixth graders are enrolled in P.E. while about 28% of the eighth grade is enrolled in P.E. The P.E. department has implemented units on team sports and physical fitness which address the cognitive, psychomotor, and afftecitve domains. Physical fitness is related to health through classroom introduction followed by implementation.

Piti's intramural program consists of various sports activities and is set up so that students have several choices in the type of activity in which they wish to participate. Sports such as volleyball, basketball, soccer, teatherball, jump rope, and flag football are offered during the 50 minute lunch period. Supervision of the activities is voluntary. There is a designated intramural coordinator who sets up the proper equipment for each activity.

Piti administrators indicate promotion and retention is basically straight-forward where the student's academic achievement is the main criteria for promotion. Students running the risk of being retained are provided counseling; parents are informed of the possibility or retention as early as the first quarter of the school year. Students who fail 3 academic areas (Math, Social Studies, Science or Language Arts) become candidates for retention. A student who has been retained once during middle school can not be retained again during the middle school grades. Piti retained a total of 20 students during school year 1988-89 and six during school year 1989-90. The 1988-89 rate per 1000 students enrolled was 25.7.

Piti administrators indicated they follow the "standard disciplinary procedures for DOE". Last school year Piti held 8 DAC meetings. The four year DAC meeting average was computed to be 3.3 meetings per year.

Piti did not offer suggestions on what it would take to implement a system of mini-courses at the school. The administration did indicate exploratory courses it would like to see offered at the school. These included computer use, vocational courses and sports activities.

5. *F.B. Leon Guerrero Middle School* enrolls 970 students in grades six through eight. Of these, 37.3% are Chamorro and 34.2% are Filipino. A little over 19% are Caucasian and 4.0% are Black Americans. The school serves a large U.S. military population. Nearly 52% of the student population are male. F.B. Leon Guerrero is located in the village of Yigo and is adjacent to Simon Sanchez High School. F.B. Leon Guerrero employs 3 fully certified guidance counselors. This represents a student to guidance counselor ratio of 323:1. Approximately 29% (N = 16) of Leon Guerrero teachers hold elementary certification; 65 % of the teachers at Leon Guerrero hold secondary certification. Three teachers hold dual certification.

F.B. Leon Guerrero has a four year mean suspension rate of 206 students suspended per thousand students enrolled. The four year average suspension per 1000 referrals was found to be 250 suspensions. In other words, F.B. Leon Guerrero administrators, during the current school year, suspended 250 students per each 1000 students referred to the office for disciplinary reasons.

Physical education and health is required of all 6th grade students. These students take a semester of each. All seventh grade students take a quarter of health and three quarters of physical education. Sixty percent of the seventh graders take art and music for a semester; 40% take band or choir for a full year. About 60% of all eighth grade students take a quarter of health and three quarters of Physical Education. Eighth grade students in honor band or choir do not have the option of taking physical education or health. The physical education curriculum teachers specific sports such as volleyball, basketball, flag football, ping pong, softball, track and field, dance and physical fitness. In addition to physical education and music, eighth graders also take practical arts comprised of home economics, career education, industrial arts and a business related course. For 1990-91 the focus of the business related course will be Guam's tourist industry.

F.B. Leon Guerrero's intramural program operates on Monday's and Friday's during the time mini-courses are being offered. The intramural activities are organized around QUADS with each QUAD fielding no more than two teams per designated activity. Two teachers coordinate the program with mini-course teachers. No estimates of the number of participants in the program were given. A copy of F.B. Leon Guerrero's Intramural Rules and Regulations may be viewed in Appendix B.

F.B. Leon Guerrero has extensive written guidelines relative to its retention committee (See Appendix C). The guidelines appear to follow Board of Education policy 339 and 348 relative to retention and promotion. A student is considered for retention if a majority of the committee votes for retention. Students may be retained for poor academic performance or excessive absenteeism. Students over-aged for a grade are normally not retained. F.B. Leon Guerrero retained 15 students in 1990. This represents a retention rate of 15.5 students per 1000 enrollment.

F.B. Leon Guerrero officials outlined a discipline referral process that broke out discipline problems into minor and major offenses. Penalties and actions were described for various offenses and repeated offenders. According to Pupil Personnel Services records, F.B. Leon Guerrero held no DAC meetings during school year 1989-90. The four year DAC meeting average was computed to be 4.5 meetings per year.

F.B. Leon Guerrero lists an extensive array of teacher-taught mini-courses for the past three years. Mini-courses included sports (golf, soccer, track and field), Chess, animation, German/Russian, dance, fantasy games, backgammon, aerobics, foods around the world and many more too numerous to list here. A complete listing of the mini-courses offered over the past three years may be viewed in Appendix D.

The overall feeling of F.B. Leon Guerrero administration is that the school needs more sports activities and a place to conduct these activities. The guidance and coulseling program is primarily preventive in nature with the counselor serving as a resource person. Each teacher serves as an advisor to a small group (18-20) of students. This pattern of advisement is often referred to a a "hombase" program of teacher advisement. When a student expresses serious concern, the teacher advisor refers her/him to the counselor. The guidance or health counselor may also come into the homebase class to discuss topics the advisor may not feel comfortable discussing. The counselor office also houses numerous videos and booklets on affective education of which the advisor may borrow to conduct a hombase lesson. Paperwork traditionally managed by the guidance counselor (registration and scheduling) is now done by teams of teachers. This allows the counselor more time to work with troubled students who need counseling. The counseling program tries to teach skills to students that include refusal skills, decision-making skills and communication skills.

6. Inarajan Middle School enrolls 437 student in grades six through eight. Of these, 92.7% are Chamorro. Nearly 55% of the enrollment are male. Inarajan Middle school is located on the same campus as Inarajan Elementary School in the Village of Inarajan. Inarajan Middle School employs one certified guidance counselor. This represents a student to guidance counselor ratio of 437:1. Unfortunately, Inarajan Middle school did not complete the administrator survey on time to be included in this section.

It should be noted here that Inarajan Middle School was authorized by then Director of Education Gloria Nelson to implement the F.B. Leon Guerrero Model beginning School Year 1987-88. Teachers and administrators underwent training during the summer of 1987 by a group of volunteer F.B. Leon Guerrero faculty on the F.B. Model. The model was implemented in the sixth grade at Inarajan Middle School during School year 1987-88. Plans called for gradual implementation in grades seven and eight over the next three years. When the school's administration changed at the beginning of School Year 1988-89, the implementation of the interdisciplinary model was cancelled. Persons interested in information about Inarajan Middle School should contact the school principal.

IV. FINDINGS

This section of the report is organized into four subsections relative to specific aspects included in the evalution of F.B. Leon Guerrero Middle School.

Part A: Information on per pupil-teacher costs, per pupil operational costs, pupil attendance, and number of teachers with masters' degrees at each middle school.

Part B: Aspects or practices educators believe to be important for Guam middle schools within the context of the extent these important practices exist within F.B Leon Guerrero and the other middle schools considered as a group.

Part C: Teacher morale at each school.

Part D: Cognitive and affective outcomes.

A. Teacher Ratios, Staffing, Per Pupil and Operating Costs

The Title I of the Elementary and Secondary Education Act (ESEA, Title I) provides a method for determining if schools receiving Title I funding are comparable to schools not receiving funds. The method involves factoring out the portion of teacher salaries attributable to various government benefits (life and health insurance, government retirement contributions, employee length of service, etc.). **Table 3** presents Guam middle school teacher (includes librarians and counselors) salary information treated in this manner. Other information is also presented in the table, such as rankings of the six middle schools on several variables believed to relate to middle school quality.

1. Teacher Salaries; Base, Per Pupil Teacher Cost

The base, per pupil, teacher cost was computed after determining step one (1) of each teacher pay range. This had the effect of removing the portion of teacher salaries due to longevity or length of service. Government benefits, such as retirement, health and life insurance were also excluded from the calculations. From the information in Table 2 it is possible to conclude that the number one ranked middle school with the highest per pupil, teacher cost was Johnston Middle School at $1,397 per pupil. This was 1.90 standard deviations above the average pupil per teacher cost. In other words, for every pupil enrolled at Johnston, $1,397 is spent on teacher salaries. The school with the lowest per pupil teacher cost was F.B. Leon Guerrero Middle School with $1,134 per pupil. This amount was 0.90 standard deviations below the average per pupil teacher cost of $1,218 per pupil. F.B. Leon Guerrero Middle School's per pupil teacher cost ranked number six out of six schools at $1,134 per pupil. It should be noted that F.B.Leon Guerrero has one teacher budgeted from Johnston Middle School on its staff. All teachers budgeted

Table 3
Rank of Middle Schools on Per Pupil Teacher Cost and Other Selected Variables

	Base (Step1) Per Pupil Teacher Costs	Per Pupil Operating Costs	Pupils Per Teacher Ratio	Percent of Teachers with MA or Higher
A.I. Johnston	[1] $1,397	[4] $136	[6] 14.95	[2] 44 %
Inarajan	[2] 1,235	[1] 238	[5] 16.19	[6] 30
Untalan	[3] 1,200	[5] 105	[4] 16.72	[3] 36
Dededo	[4] 1,182	[6] 100	[3] 17.33	[1] 45
Piti	[5] 1,160	[2] 160	[1] 17.70	[4] 36
F.B. Leon Guerrero	[6] 1,134	[3] 141	[2] 17.63	[5] 30
AVERAGE (All Schools)	$1,218	$134	16.73	36.7

as such were included in computations for the school at which they taught. On the average , the D OE budgeted $263 more per pupil at Johnston than at F.B. Leon Guerrero.

All references to teachers in Table 3 include classroom teachers, librarians, and guidance counselors. The teacher per pupil costs are computed on the basis of Step 1 of the classification Pay Range. Per Pupil Operating costs exclude personnel salaries and benefits.

2. Per Pupil Operating Costs

The per pupil operating cost, for purposes of this report, is defined as all locally appropriated items not directly related to personnel salaries and benefits. Capital outlay for construction has not been included. Inarajan Middle School had the highest per pupil operating cost with $ 238 per pupil. This amount was 2.18 standard deviations above the district average of $ 134 per pupil. For every pupil enrolled at Inarajan Middle School the DOE budgets $ 238 to cover costs of supplies, contractual services, capital outlay and equipment. Dededo Middle School had the lowest per pupil operating cost with $ 100 per pupil being budgeted. This amount was 0.71 standard deviations below the district average. Operating costs include only those funds appropriated from the General Fund of the Government of Guam; no Federal funds or other grants in aide were included in the computations.

3. Pupils Per Teachers

While not the same as average class size, the pupils per teacher ratio is, nevertheless, an important consideration when answers to questions of efficiency are posed. Johnston Middle School has the lowest pupil per teacher ratio with 14.95 pupils per teacher. This figure was 1.74 standard deviations below the district average of 16.67 pupils per teacher. On the other hand, F.B. Leon Guerrero had the second highest pupil per teacher ratio with 17.63 pupils per teacher. This figure was 0.95 standard deviations above the district average. This ratio was 2.68 more pupils per teacher than Johnston Middle school, the school with the lowest pupil per teacher ratio.

4. Percent of Teachers With a Masters' Degree or Higher

Dededo Middle school ranked number one with respect to the percent of teachers with Masters' or higher degrees. About 45 percent of Dededo Middle School's teachers had Masters' degrees or higher. Inarajan and F.B. Leon Guerrero each had about 30 percent of their teachers with Masters' degrees or higher. F.B. Leon Guerrero and Inarajan Middle Schools ranked fifth and sixth in this category, respectively.

B. Survey Of Middle School Practices And Procedures

1. Description of the Instrument and Sample

A sample (n=159) of teachers and all middle school administrators were administered the *Middle School Survey of Practices and Ideas*. The number responding represents approximately 50% of all middle school professional educators. The survey was constructed locally on the basis of a literature review that identified desirable middle school practices and ideas (ASCD. *Curriculum Update*, Nov. 1988; *Turning Points*, Carnegie Council on Adolescent Development, June 1989). The Middle School Evaluation Task Force made a conscious effort to align items on the survey with those practices and ideas. A total of 105 items were used to assess the importance of the practices and the extent the practice existed in each of Guam's six middle schools. The survey was organized around seven major themes:

- Guidance and Advisement
- Organization for Instruction and Teaching Strategies
- Curriculum Integration
- Transition and Orientation
- Exploratory and Mini-Courses
- Intramurals and Extracurricular Activities
- Administrative Leadership and Decision Making

An eighth theme, School and Community Relations, was also assessed by combining items from the seven major themes above. A total of six items were used to assess this dimension.

Educators were also asked to respond to four criterion questions designed to determine the extent they believed the programs at their middle school met the unique needs of middle school youngsters in the social, emotional, academic, and physical development areas.

A fifth and final criterion question was designed to determine the extent educators believed their school had implemented a true middle school concept. Asking respondents to judge the importance of certain practices and ideas and to render an opinion as to the degree of existence of the practice in their school was viewed as critical to determining middle school needs in relation to practices identified in the research literature as being important.

2. Description of the Results

Item frequencies, means, and standard deviations were computed for each item on the *Importance* and *Existence Scales* and on the five criterion questions for all six middle schools combined into one group. A "discrepancy" score was also calculated by subtracting each item mean on the *Existence Scale* from each item mean on the *Importance Scale.* Discrepancies were then analyzed in terms of their absolute value. Items on which a school's mean is relatively high (3.5 or greater) on the *Importance Scale* should be considered as areas the school may wish to pay special attention to when looking at the *Existence Scale* dimension. For example, if teachers on the average view the Guidance and Advisement goal of "Promoting self-understanding and character development" as being an important "Priority" (5.0) and yet rate the existence of the goal as "Rarely," (2.0) the school may wish to take steps to implement programs designed to promote self-understanding and character development. A "discrepancy" score was computed by subtracting the mean of the *Existence Scale* item from the mean of the *Importance Scale* item. Importance means of 3.5 or greater with discrepancy scores greater than 1.000 were then listed as possible areas for attention by the district. Individual schools may wish to look at discrepancy scores of .8 to .9.

Further analysis was performed to explore the relationships between the various questionnaire items and educators' perceived extent that a true middle school concept had been implemented in their school. It was reasoned that items most highly correlated with the implementation criterion may have the greatest influence on ensuring that effective middle schools are implemented if improved. The high number of significant correlations (79/102) between items on the Existence Scale and the implementation criterion suggests the instrument was sensitive to practices and ideas characteristic of Guam's middle school. **Table 4** presents the twenty top correlates with the implementation criterion. Of these twenty correlates 50% had to do with the guidance and advisement dimension. However, in order to determine which practices are perceived as most important in attaining the most efficient prediction of middle school implementation, a special regression analysis was conducted as part of the study. Results of this analysis are presented in the section entitled "Special Regression Analysis, page 40.

Prior to all analyses, items calling for a free response were deleted. However, results of the hand tabulations have been incorporated into the narrative where appropriate or have been included in the Appendices. Throughout the analysis, items have been grouped under the seven themes for ease of interpretation.

3. Overall Implementation of True Middle School Concepts

Table 5 presents mean ratings of the extent educators believe a true middle school has been implemented. Overall, Guam educators rated implementation of a true middle school as 5.30 on a scale of 1 to 10 with 10 being total implementation. As expected, the school with the highest implementation rating was F.B. Leon Guerrero

Table 4

Twenty Correlates of Implementation Ranked in Order of Importance

	FBLG	5 Schools	In-[illegible]	Pitt	Un-[illegible]	[illegible]	[illegible]
	$\bar{x}$	$\bar{x}$	$\bar{x}$	$\bar{x}$			$\bar{x}$
12. Promote self-understanding and character development (r=.651 p.001)	3.87	2.36	1.90	1.92	2.55	2.36	2.73
8. Increasing teachers personal knowledge of students (r=.616 p.001)	4.17	2.38	1.89	1.96	2.50	2.29	2.82
25. Schools schedule is conducive to interdisciplinary teaching (r=.611 p.001)	4.00	1.95	1.73	1.41	2.18	2.03	2.15
33. Workshops on student advisement (r=.600 p.001)	3.77	2.37	2.00	2.05	2.14	2.41	2.79
11. Providing opportunities for group discussion and decision-making (r=.588 p.001)	3.83	2.31	1.70	1.92	2.70	2.26	2.61
9. Allowing students to get to know teachers better (r=.572 p.001)	4.00	2.38	1.78	1.96	2.62	2.19	2.85
68. Short term mini-courses of 2-3 weeks duration (r=.570 p.001)	3.73	1.48	1.27	1.60	1.36	1.37	1.67
10. Increasing student motivation and learning (r=.568 p.001)	3.83	2.60	2.10	1.96	2.90	2.87	2.79
5. Career Orientation (r=.568 p .01)	3.32	2.27	1.70	2.54	2.83	2.71	2.94
18. Teachers on a team plan units of instruction (r=.567 p .001)	3.20	1.45	1.73	1.23	1.43	1.24	1.68
53. Incoming or new middle school students are assigned a peer or mentor (r=.563 p .001)	3.00	1.80	1.27	1.74	2.13	1.65	1.91
6. Academic Guidance (r=.558 p .001)	4.13	2.68	1.70	2.54	2.83	2.71	2.94
69. Short term mini-courses take advantage of special teacher interest (r=.549 p .001)	3.86	1.64	1.18	1.50	1.64	1.73	1.81
102. Collaborative decision-making exists within the school (r=.535 p .001)	3.57	2.45	2.18	2.21	2.46	2.69	2.49
4. Self-esteem and personal aspects are dealt with formally (r=.533 p .001)	4.07	2.36	2.30	2.17	2.48	2.16	2.62
3. Peer relationships and social aspects are dealt with formally (r=.518 p .001)	4.07	2.38	2.00	2.21	2.61	2.16	2.65
16. Each student has an assigned teacher advisor (r=.498 p .001)	4.55	1.85	1.20	1.50	1.91	1.84	2.27
17. Teachers share a common group of students (r=.493 p .001)	4.70	1.61	1.36	1.36	1.74	1.53	1.85
99. Planning is a collaborative process involving administrators teachers and other staff (r=.497 p .001)	3.69	2.88	2.46	2.42	3.32	3.03	2.91
7. Advisement program deals formally with human sexuality (r=.488 p .01)	3.10	2.02	2.00	1.83	2.04	1.97	2.18

Table 5
Mean Ratings of the Extent A "True" Middle School Has Been Implemented

School	N	Mean	S.D.	P
F.B.L.G.	32	7.88	1.845	0.000*
Other	119	4.61	2.505	

*Significant p < < .001

at 7.88. The difference in the extent of implementation between F.B.L.G. and all other middle schools was statistically significant (p=.001).

Table 6 presents means and standard deviations of F.B. Leon Guerrero and the five other middle schools on the extent schools were perceived as meeting the unique social, emotional, academic, and physical needs of the middle school youngsters. Means for F.B. Leon Guerrero were significantly higher than the other middle schools (p=.05) on all four aspects.

4. Importance and Existence of Middle School Practices and Ideas

Frequencies were first reviewed and the *very important* and *priority* categories were combined. Items were then ranked in order of importance on the basis of the combined categories. Those items with 50 per cent or more of the educators in the combined categories were identified as items for attention. Results of this analysis are summarized under each dimension below. Numbers in parentheses are item ranks;actual item numbers are next to the item ranks.

Guidance and Advisement

The top five practices in order of importance included an advisement program that:

(1)10. has a goal of increasing student motivation to learn,

(2) 6. formally deals with academic advisement,

(3) 4. formally deals with self-esteem and personal aspects,

(4)12. had a goal of promoting self-understanding and character development, and

(5) 3. formally deals with peer relationships and social aspects.

Next, items on the *Existence Scale* were correlated with the criterion variable "Degree of true middle school implementation."

Among the 16 items in this category, those items most highly correlated with implementation of a true middle school are:

(1)12. promoting self-understanding and character development,

(2) 8. increasing teachers' personal knowledge of students,

(3)33. workshop on student advisement,

(4)11. providing opportunities for group discussion, and decision-making, and

(5) 9. allowing students to get to know teachers better.

It should be noted that all but one item in this category (Item 14, Guidance counselors in this school spend little or no time scheduling pupils.) were highly correlated (p=.001) with the criterion implementation variable. This suggests the

Table 6

Ratings of Middle School Educators on Social, Emotional, Academic and Physical Needs

Social				Emotional			Academic			Physical		
	N	Means	SD	N	Means	SD	N	Means	SD	N	Means	SD
FBLG	32	7.18***	1.857	32	7.00**	2.048	32	7.13***	1.774	32	6.47*	2.016
Other	121	5.12	1.907	121	4.93	2.143	121	6.02	2.227	121	5.53	2.137
Total	153	5.65	2.071	153	5.38	2.279	153	6.25	2.181	153	5.79	2.406

*p = .0001
**p = .0107
***p = .0267

items in this section are sensitive to implementation of a true middle school program.

Organization for Instruction and Teaching Strategies

Items in this dimension not only looked at organization for instruction but also included eleven areas for possible staff training. Among those items related to organization for instruction 5 had fifty percent or more of the educators rating the item as "very important" to "priority." These items included:

(1)21. Instruction emphasizes critical thinking skills,

(2)22. Instruction emphasizes a basic core,

(3)40. All classes taught everyday,

(4)41. Class periods or "blocks" are 40-45 minutes, and

(5)38. There is good communication among grade level professional educators.

The importance of training was also assessed by including eleven areas educators were asked to rate on the *Importance Scale*. Those items are ranked below in order of importance:

(1)29. Effective teaching,

(2)31. Teaching styles,

(3)36. Reading in the content area,

(4)30. Culturally responsive teaching,

(5)27. Learning styles of children,

(6)33. Student advisement,

(7)35. Integrating curriculum across the content area,

(8)26. Mastery learning,

(9)28. Cooperative learning,

(10)34. Inquiry teaching, and

(11)32. Independent study.

Among the thirteen items in the organization for instruction *Existence Scale* dimension, several exhibited high correlations with the implementation criterion. These included:

(1)25. The school schedule is conducive to interdisciplinary teaching and learning,

(2)18. Teachers on a team plan units of instruction together,

(3)19. Teacher teams can change their own schedules according to student needs, (4)17. Teachers are assigned to a team that share a common group of students, and

(5)24. The school promotes small group learning experiences.

Curriculum/Integration

Among the nine items in this dimension all but two were rated by more than fifty percent of the educators as being very important to priority. The top five are reported below.

(1)45. Science in the 6th grade is a year-long course,

(2)50. Physical education is offered every year,

(3)46. Social Studies in the 6th grade is a year-long course,

(4)42. There are elective courses from which 8th grade students chose, and

(5)43. There is a semester course in family/living/health that all students must take.

Among the nine items in this dimension, those items on the *Existence Scale* that correlated highly with the implementation criterion included:

(1)50. Physical education is offered every year,

(2)48. Curriculum in this school is integrated across the various content areas,

(3)47. Students have the opportunity to participate in short-term, mini-courses

(4)46. Social Studies in 6th grade is a year-long course, and

(5)45. Science in 6th grade is a year-long.

Transition/Orientation

Three items in this dimension were rated by fifty percent or more of educators as being "very important" to "priority". These items included:

(1)51. A program for orienting new students to the school exists,

(2)57. A formal program for orienting students to the high school exists at this school, and

(3)52. Parents are provided an orientation to the philosophy and goals of the school.

Items exhibiting high correlations on the *Existence Scale* with the implementation criterion included:

(1)53. Incoming or new middle school students are assigned a peer or a monitor.

(2)52. Parents are provided an orientation to the philosophy and goals of the school.

(3)58. Orientation to the middle school is scheduled throughout the school year.

Exploratory and Mini-Courses

Display of data in this section will differ slightly than previous sections. Exploratory courses listed on the survey all exhibited a high degree of implementation/existence at all middle schools as well as importance. One exploratory course (family living/health) was viewed as being "important" to "very important" with an implementation indicated as being "sometimes." Data suggests that existence of this course in all middle schools may not be uniform across the district. Also of particular note is the relatively high correlation between the implementation criterion and short term mini-courses of 2-3 weeks that take advantage of the special skills and interests of teachers or other faculty members.

The overall low rating of exploratory courses may also mean that other courses need to be added and the interest of students polled to determine which course could be eliminated or reduced. It may be possible to offer 4 mini-courses in place of an exploratory course. Each school should scrutinize its individual data on student course interests or evaluate its exploratory course program to determine possible alternatives.

Educators listed an array of short-term courses in response to a question designed to obtain suggestions for exploratory courses. These included the following:

Human Sexuality
Tourism
Radio/TV Broadcasting
Gradening
Lifetime Sports
Study Skills
Drug Education
Foreign Languages
Refusal Techniques
Environmental Biology
Parenting
Home Management
Creative Writing
Silent Reading
Typing
Drama
Sewing
Values Education
Character Education
Publication

Intramurals, Athletics, and Extracurricular Activities

Overall, fifty percent of the educators rated a comprehensive program of intramural athletics as "very important" or a "priority" and that all students should be provided an opportunity to participate in athletics. When it came to indicating which activities should be emphasized educators indicated the following priorities:

(1)75. volleyball

(2)74. basketball

(3)76. softball

(4)73. soccer

(5)78. tennis

Interestingly, no items in this dimension exhibited significant correlations with the implementation criterion. In fact, small, negative correlations between item 70 (provision of comprehensive program of intramural athletics) and item 71 (all students are provided an opportunity to participate in athletics) and the implementation criterion were observed.

The somewhat low ratings of the importance (less than 35 percent of the educators rated specific sports activities as being "very important" to "priority") and existence of intramurals in middle schools is difficult to explain when viewed in light of the fact that, overall, middle schools were perceived as only marginally providing for the unique physical development needs of the middle school child. Perhaps the nature of the program and alleged lack of human and financial support for a comprehensive middle school intramural activity program leads educators to limit their perception of what an intramural program can be if given an environment of support.

A majority of educators in the middle schools rated programs of student government, where students were elected by peers, as "very important" to "priority;" a variety of clubs, activities, and other extracurricular programs for students were similarly rated.

Many educators took the time to suggest intramurals that should be offered at the school. The list may prove instructive as well as useful for polling students about their preferences at a later date.

Handball
Racquetball
Track/Field
Golf
Baseball
Table Tennis
Badminton
Lunch sports
Lacrose
Judo
Swimming
Aerobics/Dance
Football
Table Pool
Flag Football

Administrative Leadership/Decision-Making

All items in this dimension were rated by 50% or more of the educators as being "very important" to "priority" with the exception of item 101 (faculty are consulted about hiring of new teachers and item 105 (students have input into the development of school's discipline policy). The top five items are listed below in order of importance.

(1) 94. Learning time is protected from disruption.

(2) 88. Administrators provide support to teachers on student discipline.

(3) 84. The principal is highly visible throughout the school.

(4) 85. Resources needed to ensure the effectiveness of instructional programs are available and allocated according to established instructional needs.

(5) 89. The principal communicates openly and frankly with staff members and students.

On the decision making dimension three items were rated by 50% or more of the educators as being "very important" to "priority".

(1) 99. Planning is a collaborative process involving administrators, teachers, and other professional staff.

(2) 103. School leaders involve staff and students in reaching decisions which affect them.

(3) 100. Parents, students and community members have input into the planning process.

Items exhibiting high correlations on the *Existence Scale* with the middle school implementation criterion include:

(1)102.Collaborative decision-making exists within the building.

(2) 98.Results of yearly evaluations are used to improve the school program for the next school year.

(3)101.Faculty are regularly involved or consulted about hiring of prospective teachers or educators.

(4)100.Parents, students, community members have input into the planning process.

(5) 97.The administration, faculty, and other professional staff meet each year to evaluate the instructional, extracurricular and guidance programs at the school.

Table 7 presents how F.B. Leon Guerrero compares with the five other schools on the Administrative Leadership dimension. Significant differences between FBLG and the other schools on the *Existence Scale* were observed on items 87 (leaders involve staff and students in reaching decisions which effect them), 96 (the principal encourages staff to solve their own problems), 97 (the administration, faculty and other professional staff meet each year to evaluate the programs of the school), 98 (the results of this evaluation are used to improve the school program for next year), 99 (planning is a collaborative process involving administrators, teachers and other professional staff), 100 (parents, students, and community members have input into the planning process), 101 (faculty are regularly involved or consulted about hiring of prospective teachers or educators), 102 (Collaborative decision-making exists within the building), 103 (school leaders involved staff and students in reaching decisions which effect them), and 104 (parents and community members are involved in school decisions through advisory committees or other means [PTO/PTA])

In all cases, except item 104, FBLG's *Existence Scale* means were significantly higher than other school means.

School Community Relations

Table 8 presents item means for the six school and community relations dimension. Six items were selected as being representative of the school-community relations dimension. These six items in order of importance were:

Table 7
Administrative Leadership Means and Standard Deviations

Practice	Importance						Existence					
	FBLG			Other Schools			FBLG			Other Schools		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
84. The principal is highly visible throughout the school	4.3	0.813	32	4.2	0.882	119	3.3	1.045	31	3.79	1.169	132
85. Reources needed to ensure the effectiveness of instructional programs are available and allocated according to established instructional priorities	4.4	0.715	31	4.2	0.797	114	3.2	0.864	31	3.23	1.075	120
86. Classroom visits to observe instruction are done frequently by the administrators	3.8	0.895	32	3.3	0.999	118	2.7	0.971	32	2.9	1.042	121
87. Leaders involve staff and students in reaching decisions which effect them	3.8	0.884	32	3.5	0.951	118	3.4	0.803	31	2.9	1.179	121*
88. Administrators provide support to teachers on student discipline	4.5	0.722	31	4.3	0.853	119	3.7	0.858	30	3.6	1.099	121
89. The principal communicates openly and frankly with staff members and students	4.2	0.762	32	4.1	0.935	118	3.9	0.854	31	3.7	1.221	121
90. School leaders expect all staff to meet high instructional standards	4.2	0.793	32	4.0	0.978	119	3.7	0.902	31	3.6	1.182	121
91. The principal has a clear understanding of the school's mission and is able to state it in direct concrete terms	4.3	0.888	32	4.1	0.937	117	4.4	0.719	31	3.7	1.199	121
92. Instructional leaders check student progress frequently relying on explicit performance data	3.9	0.948	119	3.8	0.946	119	3.5	0.860	30	3.2	1.206	122
93. The principal evaluates teachers based on criteria which focuses on instructional improvements	3.9	0.893	32	3.8	0.953	117	3.2	0.956	31	3.2	1.187	119
94. Learning time is protected	4.3	0.672	32	4.2	0.863	120	3.2	0.817	30	3.1	1.134	122
95. The principal effectively runs meetings which have a clear agenda where discussion is limited to relevant topics	3.8	0.738	32	3.9	0.916	120	3.8	0.703	31	3.5	1.099	122
96. The principal encourages staff to solve their own problems	4.0	0.863	32	3.8	0.871	120	4.0	0.815	30	3.4	1.162	123*
97. The administration faculty and other professional staff meet each year to evaluate the programs of the school	4.1	0.896	32	3.6	0.934	119	3.4	0.923	31	2.8	1.179	122*
98. The results of this evaluation are used to improve the school program for next year	4.3	0.787	32	3.7	1.011	116*	3.8	0.861	29	2.9	1.268	114*

Table Continued on next page.

Table 7 (Continued)

Practice	Importance						Performance					
	FBLG			Other Schools			FBLG			Other Schools		
	Means	SD	N	Means	SD	N	Means	SD	N	Means	SD	N
99. Planning is a collaborative process involving administrators teachers and othe professional staff	4.1	0.922	31	3.9	0.905	120	3.6	0.891	29	2.9	1.122	121*
100. Parents students community members have input into the planning process	3.8	0.913	30	3.5	1.061	120	2.8	0.981	31	2.3	1.010	121*
101. Faculty and regularly involved or consulted about hiring of prospective teachers or educators	3.7	1.022	30	3.1	1.193	118*	3.1	1.248	31	1.6	0.885	122*
102. Collaborative decision-making exists within the building	3.9	0.870	31	3.4	0.976	118*	3.6	0.936	30	2.6	1.037	122*
103. School leaders involve staff and students in reaching decisions which effect them	3.7	0.762	31	3.7	0.887	117	3.1	0.776	30	2.6	1.099	122*
104. Parents and community members are involved in school decisions through advisory committees or other means (PTO/PTA)	3.5	0.723	30	3.5	1.007	119	2.0	0.796	31	2.8	1.109	122*
105. Students have input into the development and implementation of the school's written dicsipline policy	3.2	1.095	30	3.2	1.140	118	2.1	0.885	31	1.9	1.019	121

Table 8
School Community Relations Importance and Existence
N's, Means and Standard Deviations

Practice	Importance						Existence					
	FBLG			Other Schools			FBLG			Other Schools		
	Means	SD	N	Means	SD	N	Means	SD	N	Means	SD	N
100. Parents students and community members have input into the planning process	3.8	0.913	30	3.5	1.061	120	2.8	0.981	31	2.3	1.010	121*
52. Parents are provided an orientation to the philosophy and goals of the school	4.0	0.892	31	3.4	1.035	117**	4.0	1.189	32	2.4	1.276	121*
104. Parents and community members are involved in school decisions through adivosry committees and other means (PTO/PTA)	3.6	0.728	30	3.5	1.007	119	2.0	0.795	31	2.8	1.109	122*
56. Teachers routinely call parents of students	3.7	0.909	31	3.3	1.006	118	3.4	0.898	30	3.0	0.919	120*
54. Parents have the opportunity to visit classes and are routinely invited to do so	3.3	0.998	32	3.3	1.016	118	3.0	1.110	31	2.6	1.183	120
55. Time is provided teachers to visit or phone students who enroll in the school	3.2	1.157	32	2.9	1.019	118	3.4	1.259	31	2.3	1.283	118*

(1)100. Parents, students, community members have input into the planning process [54.7],

(2) 52. Parents are provided orientation to the philosophy and goals of the school [52.1],

(3)104. Parents and community members are involved in school decisions through advisory committees or other means (PTO/PTA) [51.7],

(4) 56.Teachers routinely call parents [44.3],

(5) 54.Parents have the opportunity to visit classes and are routinely invited to do so [39.3], and

(6) 55.Time is provided teachers to visit or phone students who enroll in the school [30.6].

Items exhibiting significant correlations on the *Existence Scale* with the implementation criterion included:

(1)100. Parents, students, and community members have input into the planning process,

(2) 52. Time is provided teachers to visit or phone students who enroll in the school, and

(3) 54. Parents have the opportunity to visit classes and are routinely invited to do so.

Educators from the six middle schools, when rating the importance of the six items, differed significantly only on item 52, the importance educators attach to parent orientations. F.B. Leon Guerrero educators viewed parent orientations as being more important than the other five schools.

5. Special Regression Analysis

The analysis of the educator survey data with respect to the correlations between individual items and the ratings of overall implementation of the middle school concept at each school revealed that 79/105 (75%) of the items on the survey produced significant (p=.001) correlations. This suggests that the survey items were sensitive to the implementation of a true middle school concept in the Guam schools.

However, in order to sort out which of these items is most important in contributing to the implementation of a true middle school concept, a special regression analysis was conducted. The results of multiple regression analysis suggest that the following ideas on practices (in order of importance) make important and unique contributions to the prediction of overall implementation of a true middle school concept for Guam public schools (multiple correlations=.76):

- 12. Advisement program that has as its goal the promoting of self-understanding and character development.
- 25. A school schedule that is conducive to interdisciplinary teaching and learning.

- 50. Physical education that is offered every year.
- 99. Planning that is viewed as a collaborative process involving administrators, teachers, and other professional staff.
- 94. Learning time is protected from disruption.
- 106. A school that meets the unique social needs of middle school students to a high degree.
- 60.The school provides for semester long exploratory courses in a variety of areas.

On the other hand, besides meeting the emotional and academic needs of middle school children, two other practices make important and unique contributions to meeting the social needs (multiple correlation = .98) of middle school children.

- 72. Students are provided opportunities to compete against other middle schools.
- 44.The school has a band program as part of the regular school day.

The results also suggest that providing for the students emotional needs will go a long way towards meeting social needs of the middle school youngster. Guidance and advisement program aspects that correlate highly with implementation of a true middle school concept include:

- 12. Promotion of self-understanding and character development,
- 8. & 9. Increasing teacher personal knowledge of students and increasing student knowledge of teachers,
- 11. Providing opportunities for group discussion and decision making,
- 5. Career orientation,
- 4. Self-esteem and personal aspects as goals, and
- 16. Each student has an assigned teacher advisor.

The data also suggest two practices make important and unique contributions to meeting the unique academic needs of middle school children:

- the role of the guidance counselor is clear and unambiguous
- learning time is protected from disruption.

6. School District Discrepancy Analysis

The other manner in which the data from the survey was analyed involved computation of a discrepancy score. This discrepancy score was generated by subtracting the mean of each item on the *Existence Scale* from the mean of each item on the *Importance Scale*. It was reasoned that any Importance Scale mean greater than 3.5 was probably a practice that needed to be analyzed in terms of the status of its implementation or existence in the school system. Only practices with Importance Scale mean ratings higher than 3.5 and discrepancy scores greater than 1.000, have been identified below. The following results were obtained using these criteria. The Guam School System middle schools should develop action plans for School Year 1990-91 that focus on:

- **Guidance and Advisement**

7. developing school advisement programs that deal with human sexuality.

16.developing a plan of advisement that includes teachers as advisors and the training to support the program.

4. developing an advisement program in the district that formally deals with self esteem and personal aspects of students.

12. establishing a formal advisement program in the district that has goals of promoting self understanding and character development.

- **Organization for Instruction**

This dimension had two discrepancy scores greater than 1.000. However, two items are listed that had discrepancy scores that approached unity. The Guam School System middle schools should develop action plans for School Year 1990-91 that focus on:

19. school level schedules that enable teachers to change change their own schedules according to student needs.

17. creating a school organization that would enable teachers to share a common group of students so teachers could plan together and share common information about students. This is not meant to imply implementing a team teaching concept, but rather an interdisciplinary team of teachers who share a common group of students. Teachers on a team *might* plan units of instruction together.

25. developing a school schedule that is conducive to interdisciplinary teaching and learning.

21. integrating the teaching of critical thinking skills into the various curricular areas.

- **Curriculum Integration**

The Guam School System middle schools should develop action plans for School Year 1990-91 that focus on:

52. developing orientation materials for parents of middle school children that stress the philosophy and goals of the middle school program.

53. a plan that would assign incoming and new middle school students a peer or a mentor.

51. developing a formal pre school orientation program for incoming 6th grade students.

- Intramurals, Athletics and Extracurricular Activities

The Guam School System should develop:

70. a district wide and coordinated comprehensive program of intramural athletics.

- **Administrative Leadership**

The Guam School District should develop action plans that focus on:

94. making sure learning time is protected from disruption.

89. increasing communication among school administration, faculty and students.

85.a system that will ensure that resources needed to support effective instructional programs are available and allocated according to established instructional priorities.

97.developing a system that would enable the administration, faculty, and other professional staff to meet each year to evaluate the instructional, extracurricular, and guidance programs at the school and district level.

98. using the results of this evaluation to improve the school program for the next school year.

- **Decision Making**

The Guam School District should develop action plans that focus on:

100. developing ways in which parents, students, and community members can have more input into the planning process.

103. developing plans to assist school leaders to involve staff and students in reaching decisions which affect them.

99. making sure school level planning is a collaborative process involving administrators, teahers, and other professional staff.

- **Inservice Training**

Educators were also asked to determine the importance and existence of specific inservice training activities. Using the discrepancy score analysis method, five areas for continued staff development and inservice were identified as priorities.

27. Learning styles of children.

30. Culturally responsive teaching.

35. Integrating curriculum across the content areas.

31.Teaching styles (models of teaching).

The high importance rating of the "Effective Teaching" and the relatively high discrepancy score (1.072) indicates educators desire courses that will lead to effective teaching and learning. Presumeably then, concentrating inservice activities on the above four areas will lead to more effective teaching and learning. Inservice training should also be considered in the area of assisting teachers to advise students if a teacher advisor program is implemented. Of particular concern is that teachers be given information as to their responsibility with respect to child abuse laws of the Territory and their obligations under the law to report suspected cases of such abuse.

Educators also listed several inservice courses they would like to have offered. These included:

Middle School Concepts	Discovery Learning	Hands on Learning
Computer Aided Instructoin	Crisis Intervention	Higher Order Thinking SKills
Graphic Organizers	Affective Education	Assertive Discipline

- **Summary of F.B. Leon Guerrero Findings**

The Survey of Middle School Practices and Ideas also identified several areas of the F.B. Leon Guerrero Interdisciplinary model that requires attention. The guidance and advisement program needs to focus more on self esteem and personal aspects of student life and continue to make sure all teachers acquire the necessary information about their students to provide meaningful advisement. More emphasis on integrating the teaching of critical thinking skills into all core curricular areas needs to be accomplished and communication among grade level professionals needs to be enhanced. Training for F.B. teachers on inquiry teaching and independent study techniques need to be included as part of staff development.

The large number of complaints from military dependent students and their parents would suggest that a move to Guam is a traumatic event for most families; the school is a readily available scapegoat for these families. For this reason anything the school could do to assist children from dependent families to adjust to Guam would only enhance the operation of the school. Assigning new and incoming students a peer advisor or mentor would be one way to address this need. Certainly the creation of smaller academic units within the school (interdisciplinary teams) have had a positive impact on all students. However, the F.B. Administration may want to consider teams or "schools" within the school that would include all grade levels in its composition. Older students could be the focus of a student advisement program for younger students having difficulty adjusting to the school. This could also increase the level of communication among the various grade level faculty. The school may also wish to increase the frequency of its orientation program programs as well. Studies at the local level (17) documented the viability of an in school orientation program for Guam elementary students; the findings of this study should be applicable to middle schools on Guam as well.

Four areas of administrative leadership and three in the area of decision making stood out as needing attention. The F.B. administration in general needs to work to become more visible throughout the school and increase the frequency of classroom visits to observe instruction. The administration, periodically needs to make sure the resources needed to ensure the effectiveness of instruction are available and allocated according to established instructional priorities. The administration also needs to periodically assess faculty perceptions of whether or not the planned activities at the school are disruptive to the instructional process.

The three areas identified in the area of decision making all had to do with involving parents, community, and students in the affairs of the school. Parents and community members need to be involved in school decisions and planning processes through advisory committees or other means (business sponsorships/adoption, PTO, etc). Students periodically need to have input into the development and implementation of the schools written discipline policy.

C. Teacher Morale and Work Site Satisfaction

Note: The Task Force is indebted to Phill Mendel, Ed.D. for the preparation of this section of the report and Richard Sorby for the graphs found in Appendix E.

1. Design of the Study

The nationally normed *Purdue Teacher Opinionaire, Revised Form* (PTO) (18) was administered to a random sample of middle school teachers to determine teachers' level of satisfaction with ten specific work site conditions and their self-determined level of morale. Use of the PTO enabled the Middle School Evaluation Task Force to compare the results of the 1990 F.B. Leon Guerrero study to results from a similar study conducted in 1987 (19) and the 1990 F.B. Leon Guerrero data with results from other middle schools. Teacher morale was measured by a single item. Teachers were asked to estimate their level of morale by circling a number on a seven point scale, from a low of 1 to a high of seven.

An average of 74% of those randomly selected returned the survey; F.B. Leon Guerrero had the highest return rate at 88% while A.I. Johnston Middle School had the lowest at 62%.

Teacher Satisfaction Subscales

The PTO yields a total score indicating teachers' overall satisfaction and a subscore for level of satisfaction with each of the following work conditions:

1. **Teacher Rapport With Principal** - subject deals with the teacher's feelings about the principal and his/her professional competency, interest in teachers and their work, ability to communicate, and skill in human relations.

2. **Satisfaction With Teaching** - pertains to teacher relationships with students and feelings of satisfaction with teaching.

3. **Rapport Among Teachers** - focuses on a teacher's relationships with other teachers. The items solicit the teacher's opinion regarding the cooperation, preparation, ethics, influence, interests, and competency of the teacher's peers.

4. **Teacher Salary** - pertains to the teacher's feelings about salaries and salary policies.

5. **Teacher Load** - deals with such matters as record keeping, clerical work, "red tape", community demands on teacher time, extracurricular load, and keeping up-to-date professionally.

6. **Curriculum Issues** - solicits teacher reactions to the adequacy of the school program in meeting student needs, in providing for individual differences, and in preparing students for effective citizenship.

7. **Teacher Status** - samples feelings about the prestige, security, and benefits afforded

by teaching. Several items refer to the extent to which the teacher feels accepted by the community.

8. **Community Support of Education** - deals with the extent to which the community understands and is willing to support a sound educational program.

9. **School Facilities and Services** - has to do with the adequacy of facilities, supplies, and equipment, and the efficiency of the procedures for obtaining materials and services.

10. **Community Pressures** - gives special attention to community expectations with respect to the teacher's personal standards, participation in outside school activities, and freedom to discuss controversial issues in the classroom.

Reliability of the PTO

Reliability of the total score on the PTO was found to be .87 (18). Scores on the individual factors ranged in reliability from .62 (lack of Community Pressures) to .88 (Teacher Rapport With Principal). Authors of the instrument wrote, "To the extent that teachers agree with one another, are self consistent in their ratings, and content validity is exhibited, at least adequate validity may be assumed".

2. Findings

Findings from the 1990 study and how they compare to results from the initial 1987 study are presented in **Table 9.** A complete set of graphs, depicting the 1987 and 1990 mean values on each subscale as well as Total Satisfaction and Morale may be viewed in Appendix F. The graphs in Appendix E also report high and low national norming points for comparison to a national sample of teachers in Indiana and Oregon.

The data in Table 9 indicates that the sample of 1990 F.B. Leon Guerrerro teachers remained fairly stable in terms of their satisfaction with the ten worksite conditions when compared with data gathered in 1987. On only one worksite condition (Teacher Salary) was the change from 1987 to 1990 statistically significant ($p = .05$). Evidently F.B. Leon Guerrero teachers, as well as teachers in all the other middle schools, were significantly less satisfied with their salaries in 1990 than they were in 1987 (the reader should keep in mind that the PTO was administered prior to enactment of Public Law 20-166 which increased teacher and School Program Consultant salries across-the-board by $5,440).

The reader may wish to make note of the fact that on three worksite conditions F.B. Leon Guerrero teachers exhibited slight increases, although not statistically significant, in satisfaction. These worksite conditions included positive increases in Teacher Load, Community Support of Education and Lack of Community Pressures. Overall Morale at F.B. Leon Guerrero showed a slight increase as well, although this increase was not statistically significant. However, the observed decrease in Morale at all other middle schools was found to be statistically significant ($p = .05$).

Statistically significant decreases on eight of the ten worksite coditions at all other middle schools were observed as well as on Total Satisfaction. Overall it appears that the 1990 teachers in other middle schools were less satisfied with teaching, had less rapport with other teachers, were less satisfied with their teaching load, curriculum issues, teacher status, community support of education, school facilities and services and Total Satisfaction than teachers in 1987.

Table 9
Extent There Was A Change in Worksite Satisfaction and Morale in Guam Middle Schools from 1987 to 1990

Satisfaction Aspect	Did F.B. Change From 1987 to 1990?	What was the Direction of Change?	Was the Change Significant?	Did Other Schools Change From 1987 to 1990?	What was the Direction of Change?	[illegible]
1. Teacher Rapport w/ Principal	Yes	(-)	No	Yes	(-)	No
2. Satisfaction w/Teaching	Yes	(-)	No	Yes	(-)	Yes
3. Rapport Among Teachers	Yes	(-)	No	Yes	(-)	Yes
*4. Teacher Salary	Yes	(-)	Yes	Yes	(-)	Yes
5. Teacher Load	Yes	(+)	No	Yes	(-)	Yes
6. Curriculum Issues	Yes	(-)	No	Yes	(-)	Yes
7. Teacher Status	Yes	(-)	No	Yes	(-)	Yes
8. Community Support	Yes	(+)	No	Yes	(-)	Yes
9. School Facilities & Services	Yes	(-)	No	Yes	(-)	Yes
10. Community Pressures (Lack)	Yes	(+)	No	No	n.c.	N.A.
11. Morale	Yes	(+)	No	Yes	(-)	Yes
12. Total Satisfaction	Yes	(-)	No	Yes	(-)	Yes

D. Student Outcomes

1. Student Attendance Patterns In Guam's Middle Schools:Average Daily Absentee Rates (A.D.A.)

Table 10 presents information relative to average daily absentee rates in all Guam middle schools beginning School Year 1985-86 through School Year 1988-89. Information for the current school year is not normally computed until the end of July when all district reports have been recieved by the district office. F.B. Leon Guerrero has a four year daily absentee rate of 6.89%. This means that on the average, on any given day at F.B. Leon Guerrero, 6.89 percent of the student body is absent. With an enrollment of about 970 students, nearly 67 students are absent at F.B. L. G. on any given day. This rate is 1.05 % less than the average of the other five middle schools combined. Over the four year period F.B.L.G. had a lower absentee rate than any other middle school. While 1.05 % may seem like a small figure, consider what would happen if all middle schools in the district reduced the absentee rate by this amount. This would mean that on any given day nearly 60 fewer middle school children would be absent from school. A 1.05 % reduction in absentee rates across the district translates to a total of 64,800 instructional hours.

While F.B. Leon Guerrero's four year average absentee rate is lower than the five school average, personnel at the school and district office should be concerned about the somewhat erratic rate over the four years of the analysis. During the second year of pilot operation (1986-97) the absentee rate at F.B. was 6.43%; the next year it dropped to 6.25% and climbed to its highest rate of 7.46 % in 1988-89. According to the school's principal, it was during the 1988-89 school year that permission was received from the district to release school twice a month in the afternoons for the purpose of conducting staff development, inservice training, and team planning activities. Evidently many students decided not to come to school at all on those days, thus increasing the school's daily absentee rate.

2. Student Self Esteem as Measured by a Nationally Normed Test

One anticipated aspect of changing to a middle school plan of operation was an increased emphasis on the pupil guidance and advisement functions of schools that would result in students with more positive attitudes towards school, self and others. Coopersmith (19) found that the achievement of a favorable self-esteem toward oneself has been regarded as important by a number of personality theorists from Rogers to Horney and Adler. He indicates that self-esteem refers to the evaluation a person makes and customarily maintains with regard to him- or herself. Self-esteem expresses an attitude of approval or disapproval and indicates the extent to which a person believes him- or herself capable, signicant, successful, and worthy. The Evaluation Task Force believed increased self-esteem to be an important outcome of the middle schools and selected Coopersmith's Self Esteem Inventories (SEI), School Form as the instrument to measure self-esteem.

Table 10
Average Daily Absentee Rates for Guam Middle School Ranked on Highest Daily Absentee Rate

SCHOOL		Daily Absentee Rate				Four Year Average
		1988-89	1987-88	1986-87	1985-86	
1]	Johnston	8.97 %	8.23 %	8.52 %	9.40 %	8.77 %
2]	Piti	7.77	7.09	8.17	8.57	7.90
3]	Dededo	7.56	7.09	7.69	8.01	7.59
4.5]	Inarajan (tie with FBLG)	7.46	8.65	8.19	9.18	8.37
6]	Untalan	7.23	6.38	7.98	8.08	7.42
Five School AVERAGE		7.84	7.36	8.08	8.46	7.94
4.5]	FBLG (tie with Inarajan)	7.46	6.25	4.43	7.41	6.89
AVERAGE (All Schools)		7.77	7.18	7.82	8.30	7.77

The SEI, School Form is designed to be administered to students aged eight through fifteen. The SEI measures evaluative attitudes toward the General-Self, Social-Self, Home-Parent Self, and School-Academic Self. There is also a "Lie-Scale" that indicates extremely socialized response sets and if the respondent has determined what is being measured and is answering all items in a positive manner. A Total-Self score is derived by combining all items exepct the items from the "Lie-Scale". The SEI has good reliability characteristics (.87 to .90). Most researchers detected little difference between means and standard deviations of the SEI total and subscale scores of males and females.

Table 11 presents the SEI sampling plan. Students in each of the six middle schools were proportionately randomly sampled in grades six, seven and eight. A sample size of 360 was determined to be appropriate for measuring self-esteem in the middle schools.

Returns averaged 96 per cent throughout the school district. Means and standard deviations were calculated for Total SEI and all subscales by school. Analysis of variance (ANOVA) revealed that no schools differed significantly on any of the four subscales or Total SEI. A statistically significant difference was found among the schools on the "Lie-Scale" (p=.0117). As noted earlier, the Lie-Scale indicates if students are deliberately answering items in a positive manner. The analysis of covarinace (AVCOVA) was used to analyze the differences between FBLG and the other middle schools combined on the four SEI subscales and Total SEI. This analysis technique analyzes means of the various subscales and SEI Total after taking into account differences among the six schools on the "Lie-Scale".

Table 12 presents the adjusted means of respondents for F.B. Leon Guerrero and all other middle schools combined into one group for each of the four subscales and the Total SEI. After means were adjusted by the covariance procedure, the differences in means between F.B.L.G. and the other middle schools (main effects) on the General Self, Social Self-Peers, and School-Academic subscales and Total SEI were found to be significant at the .05 level of confidence (pô.05). In each case F.B.L.G.'s mean score was significantly greater than the other middle schools combined. There was no statistically significant difference between F.B.L.G. respondents and the other middle schools on the Home-Parent subscale.

3. Basic Skills Mastery Test Results

Middle schools, as designed by the Reorganization Committee, were supposed to place a great deal of emphasis on developing basic learning skills. In addition to the regularly scheduled language arts and mathematics courses, the F.B. Leon Guerrero model program uses a special skills development/study hall session once a week where teachers may provide instruction on specific skills such as reading and writing.

All Guam middle schools administer the Guam Basic Skill Mastery Tests in language

Table 11
Self Esteem Inventory Sampling Plan

School	Grade			Total	Returns	
	6th	7th	8th			
Untalan	21	21	18	60	55	(92%)
Johnston	23	24	23	70	66	(94%)
Dededo	30	30	30	90	90	(100%)
Piti	17	17	16	50	46	(92%)
FBLG	20	20	20	60	58	(97%)
Inarajan	11	10	9	30	30	(100%)
Total	122	122	116	360	345	(96%)

Table 12
Adjusted Means of SEI Subscales and Total SEI

Group	General X	Social X	Home X	School X	Total SEI X
FBLG	16.61 *	5.57 *	4.96	5.21 *	64.75 **
All Other Middle Schools	15.06	5.04	4.53	4.48	58.00
Grand Mean	15.32	5.13	4.60	4.60	59.13

*Significant $p \leq .05$

**Significant $p \leq .001$

arts and mathematics in grades six and eight twice a year in pretest, posttest fashion. As part of the evaluation design F.B. Leon Guerrero data from the BSMT administrations were analized in two manners. First, a linear regression model was developed using the 1983-1984 pretest and posttest number of skills mastered as baseline years. The development of this model enables school level faculty to predict students' expected level of posttest performance from knowledge of performance on the pretest. The years 1983-84 were chosen since this was the year before the F.B. Leon Guerrero Middle School Interdisciplinary Model was implemented. Thus, data from the year preceding the introduction of the F.B. Leon Guerrero Interdisciplinary Model is used as a "baseline". Scores were paired over the pre- to post- administration of the tests in Language Arts and Mathematics and correlated with each other. It was reasoned if the F.B. Leon Guerrero Interdisciplinary Model was having the desired impact on student basic skill achievement as measured by the Guam BSMT, then F.B. Leon Guerrero students should exceed predicted skill mastery expectencies as developed by the regression model using the 1983-84 BSMT data.

Regression models were developed for the BSMT language arts and mathematics tests. The equation for such a regression model is given by:

$$Y' = b_{yx}X + a_{yx}$$

where Y' is the predicted value, "b" is the slope of the regression line and "a" is the Y intercept. Thus, if X=5, b=0.811 and a=6.301 then Y' is given by:

$$Y' = 0.811(5) + 6.301 = 10.356$$

Thus, a student mastering 5 skills on the pretest would be expected to master 10 skills on the posttest. Tables of expectancies for F.B. Leon Guerrero are included in Appendix F and should prove useful to F.B. Leon Guerrero faculty. Regression models are currently being developed for the other middle schools, but are not included in the analysis here.

The second manner in which the BSMT data were analyzed involved using the same pre- and posttest information from 1983-84 and 1989-90 test administrations. In this case the 1983-84 data were used as a "control" group since students had no exposure to the Interdisciplinary Model. The 1989-90 data was used as the "treatment" or experimental group. All data were checked for pretest differences on the BSMT Language Arts and Mathematics tests. The "treatment" and "control" groups differed significantly on the prestest number of skills mastered, therefore analysis of covariance was used to adjust the posttest scores of the two groups by an amount equal to the correlation between the pre- and posttest.

Table 13 presents the F.B. Leon Guerrero Middle School adjusted means for grade six and eight mathematics and language arts for both the 1983-84 control and the

Table 13
F.B. Leon Guerrero BSMT Language Arts and Mathematics Adjusted Means

	6th		8th	
Group	LA	Math	LA	Math
1989-90 Treatment	17.43* (315)	12.82* (321)	12.47 (236)	7.48 (207)
1983-84 Control	16.28 (243)	10.56 (259)	12.88 (190)	7.97 (188)
Grand Mean	16.93	11.81	12.65	7.71

*Significant p ≤ .01

1989-90 treatment groups. Sixth grade treatment means were statistically significant (p=.001) from sixth grade control group means in both language arts and mathematics. The 1989-90 sixth grade students had significantly higher skill mastery posttest means, when adjusted for pretest differences, than the 1983-84 control group students. There were no significant differences found between eighth grade treatment and control groups in either language arts or mathematics posttest skill mastery.

4. Student Opinion of Middle Schools

The Evaluation Task Force also approved the development of a survey designed to gather student opinions on their interest in middle school courses and their difficulty, teacher helpfulness, time given in school to work on homework and satisfaction with their school in general. Several free response items were also included that asked students to comment on what they would change about their school, its rules and the grading used in the school.

A total of 360 students were randomnly selected across each grade and school in such a manner as to be proportionate to each school's size. A total of 351 (97.5%) usable surveys were returned by students. Student responses were broken down by each school and sent to each principal. The analysis here presents how F.B. Leon Guerrero compares to the other five middle schools on the various apsects measured by the survey. For example, the students at F.B. Leon Guerrero who had the opinion the reading course offered at the school was either too difficult or too easy were tabulated and expressed as a percentage. The school with the highest percentage among the five other middle schools was included in each table.

Table 14 presents the percentage of students believing middle school courses are too difficult or too easy. It was reasoned that a high percentage of students responding that a course was either too difficult or too easy would be an indication a school (F.B. Leon Guerrero in this case) needed to take steps to review the course objectives, methods and resources and find out why students thought the courses were difficult or easy. For example, in Table 12 nearly 42% of F.B. Leon Guerrero students thought social studies was either too difficult or easy. The highest other school was Johnston Middle school; nearly 58% of the students responding to the survey thought social studies at Johnston was either too difficult or too easy. School level personnel at F.B. Leon Guerrero may also want to review their Physical Education, Health, Chamorro Language, and Music curriculum. The reading, language arts, math, and science courses all have 20% or less of the students indicating the courses are too easy or too difficult. This may be an acceptable level for most courses, however each school should interpret its own data and decide if action is warranted.

Among the Group II courses Chamorro Language, Art, and Health had the highest percentages of students at F.B. Leon Guerrero indicating they were too difficult or easy. Other schools with high percentages of students indicating courses were too

Table 14
Percentage of Students Believing Middle School Subjects Are Too Difficult or Too Easy

Subject	F.B.L.G. Percent		Highest Other School	
	Difficult	Easy	Difficult	Easy
Group I:				
Math	5.0	8.3	30.0 (Untalan)	20.4 (Piti)
Reading	10.0	6.7	18.8 (Piti)	16.7 (Inarajan)
Science	8.3	11.7	25.5 (Johnston)	23.3 (Inarajan)
Language Arts	5.0	18.3	4.0 (Piti)	20.0 (Piti)
Social Studies	21.7	20.3	36.8 (Johnston)	20.6 (Johnston)
Group II:				
Music	0.0	32.4	10.0 (Untalan)	44.4 (Dededo)
P.E.	2.1	27.7	7.7 (Piti)	63.2 (Inarajan)
Health	8.1	37.8	35.3 (Piti)	30.8 (Inarajan)
Art	0.0	50.0	30.8 (Piti)	61.9 (Dededo)
Chamorro Language	23.8	42.9	33.3 (Untalan)	33.3 (Johnston)

difficult included Piti (Health and Art) and Untalan (Chamorro Language). Art and Music (61.9% and 44.4%, respectively) at Dededo were viewed as being too easy by students.

Table 15 presents the percentage of students interested and not interested in middle school subjects. About 43% of the students at F.B. Leon Guerrero had no interest in social studies courses. This was the highest percentage of students among all middles schools.

Table 16 Presents the percentage of students indicating teachers give time in class to work on assignments. Ninety percent (90.0%) of the students at F.B. Leon Guerrero indicated teachers "sometimes to always" gave time in class to work on assignments. Nearly twenty one (20.2%) of the Inarajan students indicated teachers rarely gave them time to work on assignments in class.

Table 17 presents the percent of students indicating satisfaction with their school. Seventy percent of the students at F.B. Leon Guerrero indicated they were satisfied with their school, while 28.3% indicated they were not satisfied. Piti Middle School had nearly 75% of its students indicating they were not satisfied with their school. The school with the next highest percentage of students satidfied with their school was Untalan with 66.1% of the students being satisfied.

Table 18 presents the percentage of students who believe the level of school rule enforcement to be "about right". A little more that 36% of F.B. Leon Guerrero students thought the enforcement of school rules was "about right". Nearly 60% if the Johnston Middle School students believed enforcement of school rules was "about right". On the other hand, one-half of the F.B. Leon Guerrero students nearly 61% of the students at Piti Middle School thought school rule enforcement was "too tough".

Table 19 presents the percentage of students indicating the adult at the school they would go to with a problem. The school guidance counselor was named by 50.8% and 55.2% of the students at F.B. Leon Guerrero and Inarajan Middle Schools, respectively. Less than 10% of the students at F.B. Leon Guerrero indicated there was no one at the school they would go to if they had a problem. On the other hand, forty two percent (42%) of the students at Piti indicated there was "no-one" at the school they would turn to with a problem. Teachers were named by 25.4% of the students at F.B. Leon Guerrero and by 28.2% of the students at Untalan Middle School. The relatively low percentage of F.B. Leon Guerrero students who would turn to a teacher with a problem is somewhat surprising, given the fact that F.B. Leon Guerrero has had a "homebase" advisement (teacher as advisor) program in effect at the school for four years.

Students were also asked to respond to several open ended questions on the survey. Students were asked if they were allowed to determine mini-courses that their school would offer next year, what would they be? Of those students

Table 15
Percentage of Students Interested and Not Interested in Middle School Subjects

Subject	F.B.L.G. Percent		Highest Other School	
	Interested	Not Interested	Interested	Not Interested
Group I:				
Math	88.3	11.7	83.4 (Inarajan)	25.4 (Untalan)
Reading	80.0	20.0	88.5 (Dededo)	44.9 (Piti)
Language Arts	79.7	20.3	83.4 (Untalan)	31.0 (Inarajan)
Science	71.7	28.3	81.0 (Dededo)	36.2 (Johnston)
Social Studies	56.7	43.3	86.2 (Inarajan)	33.0 (Johnston)
Group II:				
Music	89.2	10.8	94.6 (Dededo)	25.0 (Inarajan)
Art	86.4	13.6	95.9 (Johnston)	41.4 (Piti)
P.E.	73.5	26.5	86.5 (Johnston)	38.9 (Piti)
Health	45.3	58.4	72.2 (Johnston)	43.8 (Piti)
Chamorro	40.7	59.3	91.7 (Johnston)	42.9 (Piti)

Table 16
Percentage of Students Indicating Teachers Give Time in Class to Work on Assignments

Response	F.B. Leon Guerrero	Highest Other School
Always	20.0	25.7 (Johnston)
Sometimes	70.0	73.5 (Untalan)
Rarely	10.0	20.7 (Inarajan)

Table 17
Percent of Students Indicating Satisfaction With Their School

Response	F.B. Leon Guerrero	Highest Other School
Yes	70.0	66.1 (Untalan)
No	28.3	73.5 (Piti)
Undecided	1.7	3.3 (Inarajan)

Table 18
Percent of Students Who Believe School Rule Enforcement is About Right

Response	F.B. Leon Guerrero	Highest Other School
About Right	36.2	57.4 (Johnston)
Too Tough	50.0	60.9 (Piti)
Too Easy	13.8	11.1 (Inarajan)

Table 19
Percent of Students Indicating Various Significant Adults in the School

Adult:	F.B. Leon Guerrero	Highest Other School
Counselor	50.8	55.2 (Inarajan)
Teacher	25.4	28.3 (Untalan)
No One	13.8	42.0 (Piti)
School Aid	5.1	12.0 (Piti)
Principal	1.7	17.6 (Johnston)
Custodian	0.0	1.7 (Untalan)

responding at F.B. Leon Guerrero suggestions included computer programming, typing, gymnastics, foods from around the world, R.O.T.C., cooking, tennis, skateboarding, personal living/sports, and foreign languages (French was specifically mentioned). Other schools had similar responses and also included jazzersize, skin care, diet and nutrition, drill team, home economics, chess, and individual sports.

Anyone who has be been associated with middle school or junior high aged children realize children of this age generally complain about school lunches (not enough food, little variety, and poorly prepared) and the "mean" math or social studies teacher. The trick when interpreting student responses is to be able to determine which suggestions are constructive and sincere. Among the three hundred or so students who took the time to respond to the survey many had very good suggestions for changing the school. Overall at F.B. Leon Guerrero, students seemed to be concerned about the shortness of the lunch hours and the need for a place (indoors?) to play games. Cleaner/more sanitary restrooms were also mentioned as being desired. Some students wanted to be able to increase the time they spent in the computer room and to be able to use the computers during lunch, after and before school for homework papers and important assignments.

Students at the other middle schools had similar concerns and suggestions with a slight twist. Students at Dededo seemed to be very concerned about violence and threats of violence among and between students at the school. One student even went so far as to suggest that something needed to be done with students who had bad attitudes and that when students questioned why certain rules were in effect they needed an answer that would logically explain why. The need for longer Physical Education periods was mentioned by Johnston students and it was suggested that maybe Physical Education could be offered three times a week for longer periods. Longer passing times between classes at Johnston was also seen as a need ("three minutes not enough" according to one student).

One Dededo student expressed concern about drug problems in the school and that the school needed to do more to get rid of those problems.

V. CONCLUSIONS, SUMMARY, AND RECOMMENDATIONS

A. Conclusions/Discussion

Middle schools on Guam began operation during school year 1982-83. The decision to reorganize the district into middle schools was administrative in nature; the Territorial Board of Education only endorsed the concept of middle schools. The decision to implement middle schools was not supported by appropriate policy development or standards.

Few would argue that middle schools are supposed to be the same as junior high schools. However, many would argue that true middle schools, as envisioned by the original planners, have not been implemented entirely as intended. This evaluation has collected a great deal of data in hopes that answers to several questions (see page 2) relative to Guam's middle schools can be provided to decision makers. Answers to those questions are presented below. Each question is restated and a brief discussion follows.

- How do the Guam middle schools compare with others relative to teacher costs, operating costs, and other characteristics?

The notion that the F.B. Leon Guerrero Interdisciplinary Model is more costly than programs found at other Guam middle schools is not supported by the data collected. Under the current 1990 budget and staffing pattern F.B. Leon Guerrero had the lowest base per pupil teacher cost of the six middle schools when salaries were adjusted for longevity. Teaching positions on loan to F.B. Leon Guerrero were also included in the analysis.

Per pupil operating costs at F.B. Leon Guerrero were ranked third highest among district middle schools. Not included in these computations were funds expended that came from middle school administrators, F.B. Leon Guerrero faculty, IRA grants, and federal Territorial Teacher Training and Assistance Program. The reason for lower costs may partially be explained by the fact that F.B. Leon Guerrero has the second highest pupil per teacher ratio of all middle schools in the district. This suggests the interdisciplinary model is more efficient than the traditional junior high school models found at other schools. The relatively low percentage of teachers with masters' degrees also contributed to the lower base per pupil teacher cost. The low percentage of teachers with higher degrees did not have a negative impact on the student outcomes studied as part of this evaluation. This could have implications for recruiting middle school teachers and the district may wish to determine to most cost effective mix of degrees and credentials for its middle schools.

- What impact has the F.B. Leon Guerrero Interdisciplinary Model had on student attitudes, attendance, self esteem, and basic skill achievement?

Student Attitudes

Students from each school were polled as to their satisfaction with their school and evaluative attitudes towards general-self, social-self, home parent-self, and school academic-self. A larger percentage of F.B. Leon Guerrero students indicated satisfaction with their school than any other school. Seventy percent of F.B. Leon Guerrero students indicated they were satisfied with their school. The next highest school had 66% of its students satisfied with their school.

Student attitudes towards their school are often informative and point the school administration in directions other information fails to highlight. Results of a student survey indicates students, for the most part, tend to be interested in the core subjects of math, language arts/reading, and science. However, the F.B. Leon Guerrero social studies course had the highest percentage of students who found the course uninteresting. It may be, as one Task Force member suggested, that since students at this age are concerned with fashion, complexion, and their own appearances, social studies curriculum and text materials need to be selected and built around the lives of people more so than abstract notions of nation and state. Social studies is really about lands and people's learned ways; course materials of high interest that focus on real people, their habits, culture, and beliefs could be obtained and where possible living examples could be used in the classroom to make classroom materials come alive. What a wonderful thing for an eighth grader having difficulty with math to learn of the humanness of Albert Einstein in that he, too, had difficulty with math in eighth grade. As pointed out by the F.B. Leon Guerrero administration, students will often say a course is boring if it is too difficult or too easy. On the other hand students will often say a course is too difficult if it is not interesting. Which ever the case, the social studies curriculum would benefit from evaluation on the district level as well as within individual schools.

The same pattern of difficult/easy and interesting was observed in Chamorro Language at F.B. Leon Guerrero. This could be reflective of the large percentage (29.5%) of students of military personnel which attend the school who may not particularly value Chamorro language as a required subject. Students also indicated low interest in health and physical education. It could be, as task force members pointed out, that the lack of a text and other health curriculum support materials leaves too much to the individual teacher's knowledge base. The generally acknowledged poor or non-existent physical education facilities at all but two of the middle schools could also contribute to the relatively low interest of students in physical education. School level task force members also pointed out that more often than not sixth, seventh, and eighth grade students were required to use the shower facilities at the same time. Members suggested that grades, with respect to physical education, be kept "pure" so as to avoid the necessity of sixth grade students being in the shower room at the same time as the older and more physically developed eighth grade students. Interestingly, it was the eighth grade students who objected to the presence of sixth grade students in the shower facilities.

All middle school principals were provided copies of student survey results for their individual schools. These results need to be reviewed by the faculty and action plans developed for addressing problem areas. It is suggested that all schools survey a larger proportion of their students at the beginning of this coming school year.

Each school administrator was provided a copy of the Middle School Practices and Ideas discrepancy analysis for their school. A format was provided for writing up the results and reporting it to their own faculty. Results of both the student and faculty surveys need to be shared with school level people and action plans developed to address areas specific to each school. Middle school administrators and teachers interested in implementing selected ppractices should meet often to develop district and school level action plans. Once action plans have been formulated, middle school administrators need to design ways to increase communication among all middle school teachers and administrators. This will enable successful scheduling options and other practices to be examined and shared.

Self Esteem

F.B. Leon Guerrero student means on the General, Social, School and Total Self Esteem Inventory were significantly higher than at all other middle schools. This finding is exactly what one would expect in a school that was paying attention to the unique social, emotional, and academic needs of students. Evidence that the model at F.B. Leon Guerrero was meeting these needs also came from teachers who were asked about the extent their school provided for those needs. In each case teachers at F.B. Leon Guerrero rated the school significantly higher than did teachers at other on the extent the social, emotional, and academic needs of students were being met at the school. The teacher-advisor program, with its emphasis on human growth and development, peer relationships, and other aspects of preadolescent development has had a positive and desirable impact on student self esteem.

Attendance

F.B. Leon Guerrero had the lowest four year absentee rate of all middle schools. Higher self esteem and satisfaction with school may partially explain the overall lower absentee rates at the school. Discussions with F.B. administration and teachers indicate the advisement program at F.B. has done a lot to curtail absences. It is the homebase teacher who calls parents of students who are known to be truant, or who miss more than two days of school. These students are also counseled. F.B. administrators noticed an increase in absentee rates during school year 1988-89 and related the increase to inclusion of two professional days per month that released students from school in the afternoons. Subsequently, the

77

number of professional days was reduced from two to one per month. Attendance information is not yet tabulated for this school year (1989-90). F.B. administrators feel confident the absentee rate will decrease as a result of this change. The school has apparently succeeded at creating a sense of belonging, motivating students to learn, and having families ensure that their children attend school.

Basic Skill Achievement

Before student achievement is duscussed it should be pointed out that special education students at F.B. Leon Guerrero are mainstreamed into the regular classroom and that these students also take the BSMT. F.B. currently has only seven students 6th to 8th grade in self-contained classrooms who are not given the BSMT. Special education students district-wide in resource rooms greater than 50% of the day are not tested with the regular form of the BSMT; those in resource rooms less than 50% of the day are tested. Results of the Special Education Form of the BSMT needs to be studied to determine the effect of mainstreaming these students into the regular classroom. Pretest differences among schools need to be accounted for and posttest results adjusted for these differences.

F.B. Leon Guerrero Basic Skill Mastery Test scores in sixth grade language arts and mathematics were significantly higher than a comparison group comprised of F.B. Leon Guerrero students prior to the year the interdisciplinary model was implemented. Eighth grade students performed no differently after model implementation than the comparison group. This finding indicates that the F.B. Leon Guerrero interdisciplinary model does a credible job of providing for the transitional needs of sixth graders. It also suggests that the interdisciplinary model may not be supported to the same degree in the eighth grade as it is in the sixth grade. The large proportion of secondary certificated teachers at F.B. Leon Guerrero suggests the eighth grade may be unaffected by the changes to the middle school.

Sixth grade teachers, (most are former elementary teachers or elementary certified) because of education and training, have a better understanding of integrated curricula and how to implement an interdisciplinary model of instruction. Mastery models of teaching are more readily accepted by elementary teachers since curricular programs are more continuous in nature (less content dependent). On the other hand, eighth grade teachers, almost without exception, tend to be subject centered within the somewhat narrow confines of one or two specific areas. Many resist integrated approaches and interdisciplinary models with their basic skills approach to instruction and assessment. For example, many former junior high school teachers have little or no training on how to teach reading in the content area or how to integrate the teaching of writing or language arts into their specific subject area. There is, according to the F.B. Leon Guerrero principal, a higher turnover of eighth grade teachers at her school because they are unable to adjust to or handle eighth grade students or the integrated curriculum. Secondary language arts teachers are not reading teachers; the training and focus of many of these teachers is literature and content more appropriate to a high school. This creates a special problem since the Guam Department of Education Curriculum Skill Lists emphasize reading skills. The BSMT may be an invalid test for upper middle school students since they are being tested over materials they have not been taught. The issue of higher faculty turnover and curricular and instructional validity in the upper middle school grades needs to be investigated further.

Teacher Morale and Satisfaction

- What is the level of morale of F.B. Leon Guerrero teachers and how does this compare with other middle schools?

Overall morale at F.B. Leon Guerrero exhibited a slight increase over levels observed in 1987. This increase was not statistically significant. However, the observed decrease in morale at all other middle schools was statistically significant ($p = .05$). The significant decrease in the morale of teachers at other middle schools should be investigated further. Individual school morale levels need to be analyzed and studied for possible explanations as to why morale in other middle schools dropped.

- How satisfied are F.B. Leon Guerrero teachers with conditions at their school; how does this compare with satisfaction levels at other middle schools?

Generally satisfaction levels at F.B. Leon Guerrero remained stable compared to 1987 levels. The one exception was satisfaction with teacher salary where a significant decrease in satisfaction was observed in all six middle schools. However, shortly after teachers completed the PTO, Public Law 20-166 was passed. This public law gave all teachers an across-the-board pay increase of $5,440. It is not known if this has had an impact on satisfaction levels or not. It would be interesting to administer this portion of the PTO during the same time frame in 1991to determine if teachers were satisfied with their new salaries.

Guam teachers overall (including F.B. Leon Guerrero teachers) were slightly below the 75th percentile of the national norming group on Total Satisfaction in 1987. Total satisfaction in 1990 was still high for F.B. Leon Guerrero; the decrease observed over 1987 was not significant. The decrease observed in other schools, however, was statistically significant.

Implementation Practices

- Which practices make important and unique contributions to the prediction of overall implementation of a true middle school concept for Guam public schools?

The results of the special regression analysis suggest that seven features make important and unique contributions to the prediction of overall implementation of a true middle school concept for Guam public schools. These practices are general in nature and might best serve to guide policy development or development of goals for all middle schools. These features included:

- An advisement program that has the goal of promoting self-understanding and character development
- Goals that address the unique social needs of middle school students.
- Semester long exploratory courses in a variety of areas.
- A school schedule that is conducive to interdisciplinary teaching and learning.
- Physical education that is offered each year.
- Collaborative planning processes that involve administrators, teachers, and other professional staff in making decisions.
- Protection of learning time from interruption.

Further analysis of the data suggests that these seven features could best be supported in a number of ways. Advisement programs that formally deals with human sexually and provides opportunities for group discussion and decison-making within the classroom setting could prove instrumental in promoting self understanding and character development. Some of the social needs of students might be addressed if students were to be provided with limited opportunities to compete against other middle schools and if teacher and student knowledge of each other were increased and shared via a program of teacher advisement.

This strongly suggests that a district-wide, coordinated, and supported in-school intramural program could culminate with end-of-season opportunities for students to compete against each other; the top two or three teams from each school could compete on a given Saturday for the middle school championship. This would not necessarily need to be limited to "athletic" types of contests and could involve school bands, quiz bowl competition and other social activities designed to display the considerable talents of middle school children.

It also suggests a school organization that would enable teachers to share a common group of students so teachers could plan together and share common information about students. This could take the form of an interdisciplinary team as is the case with F.B. Leon Guerrero. Programs designed to keep groups of children together in smaller units, than now possible with the traditional grade level organization, could be designed and implemented without much difficulty, even in the larger Guam middle schools. In fact, it may be more critical for the larger middle schools to find a pattern of organization that is less impersonal.

F.B. Leon Guerrero's interdisciplinary team concept may be one way to reduce guidance counselor paperwork while at the same time increasing teacher personal knowledge of students. Academic teams also create the positive perception that the school is smaller. This also creates a less impersonal place where students each year are not required to adjust again to an essentially "new school ."

Inservice Training

The high importance rating of the inservice training topic "Effective Teaching" indicates educators desire courses that will lead to effective teaching and learning. Important subtopics under this general topic included learning styles of children, culturally responsive teaching, integrating curriculum across the content areas, and teaching styles (models of teaching). Teachers themselves suggested a course on middle school concepts should be required of all middle school teachers. If a program of teacher advisement is implemented, intensive training for teachers needs to be planned and included. Topics should include information about local and federal child abuse statutes and laws as well as group discussion techniques appropriate for middle school students.

Leadership

A number of administrative practices at F.B. Leon Guerrero tend to support implementation of a true middle school. These practices included activities that provided opportunities for faculty and staff to collaboratively plan together and share decisions. Teams of teachers were involved in interviewing teachers and the faculty was involved in extensive annual evaluations of the school as well as meetings designed to review evaluation results. This suggests a system of district middle school accreditation might be one way to insure all middle schools are evaluated. It would be critical, however, for the Territorial Board of Education to adopt goals and minimum standards for middle schools before formal accreditation is undertaken. Middle schools must develop their own standards based on what Guam believes works best and not on external standards. It would also be useful for the Territorial Board of Education to conduct a middle school policy analysis.

Improving the F.B. Leon Guerrero Model

Several areas of the F.B. Leon Guerrero Interdisciplinary model require attention. The guidance and advisement program needs to focus more on self esteem and personal aspects of student life and continue to make sure all teachers acquire the necessary information about their students to provide meaningful advisement. More emphasis on integrating the teaching of critical thinking skills into all core curricular areas needs to be accomplished and communication among grade level professionals needs to be enhanced. Training for F.B. teachers on inquiry teaching and independent study techniques need to be included as part of staff development.

Four areas of administrative leadership and three in the area of decision making stood out as needing attention. The F.B. administration in general needs to work to become more visible throughout the school and increase the frequency of classroom visits to observe instruction.

Parents and community members need to be involved in school decisions and planning processes through advisory committees or other means (business sponsorships/adoption, PTO, etc). Students periodically need to have input into the development and implementation of the schools written discipline policy.

B. Summary

Implementation of middle schools on Guam has required rethinking old patterns of organization. If middle schools are to meet all the unique needs of the preadolescent, then it will require development of more relevant policy and adoption of standards, renegotiation of pertinent sections of the Board of Education/Guam Federation of Teachers contractual agreement, additional revision of curriculum for the middle school child, revamping teacher and administrator certification requirements, and retraining staff based on the new policies and certification requirements. It will also require an aggressive teacher recruitment effort designed to attract teachers with middle school training and experience. It will require close coordination with the University of Guam teacher training programs to insure the standards the Department of Education adopts are addressed by those programs.

Data collected during school year 1989-90 reveals middle schools on Guam exist largely in name only with one notable exception; F.B. Leon Guerrero has implemented an interdisciplinary team approach that appears to be well on its way to full implementation. Findings reported here demonstrate that the F.B. Leon Guerrero model is worthy of emulation by other Guam schools. Should emulation be desired by the district it must be prepared to commit the necessary resources to aide in training staffs and restructuring the remaining middle schools. Once initial training is complete, then on-going training ought to become the norm and the district should actively recruit teachers and administrators with middle school backgrounds and training.

The model being implemented at F.B. Leon Guerrero contains many of the salient features of a true middle school. This is not meant to imply that other middle schools on Guam lack features of true middle schools. The Evaluation Task Force observed aspects of true middle schools in most of Guam's middle schools. However, F.B. Leon Guerrero educators rated the degree of implementation of a "true middle school concept" at their school significantly higher than other middle school educators at their schools. F.B. Leon Guerrero teachers also rated the extent their school provided for the unique social, emotional, academic, and physical needs of students significantly higher than middle school teachers at other schools. The information collected on student self esteem supports the notion that F.B. Leon Guerrero Middle School is doing a credible job of addressing the social and emotional, aspects of student life; information from the BSMT indicates F.B. is doing a credible job in the area of language arts, reading, and mathematics at the sixth grade level as well. The fact there was no significant difference between the eighth grade comparison group and the School Year 1989-90 students language arts and mathematics may indicate the transition from elementary to high school type programs may be too abrupt.

The F.B. Leon Guerrero administration, to a greater degree than other middle schools, tends to involve staff and students in making decisions which effect them, encourages staff to solve their own problems, and formally meets with professional staff each year to evaluate the programs of the school. F.B. Leon Guerrero administration officials, to a greater degree than other middle schools, tended to view planning as a collaborative process, encouraged parents and community members to provide input into the planning process, and regularly involved or consulted faculty about hiring prospective teachers.

C. Recommendations

The amount of information collected on behalf of the various evaluation questions was truly voluminous. Writing about the history of Guam's middle schools became an interesting project itself.

The Task Force faced a dilemma; how to write recommendations that would have maximum impact while at the same time would be viewed as something that could be realistically accomplished. The original planners of the Guam middle schools had a vision of schools that were child- as opposed to subject- or teacher-centered. They had a vision of children and adults working and learning together in a collaborative environment. They had a vision of schools that addressed all the unique emotional, social, physical, and academic needs of children in this age group.

To this end the following recommendations are offered in hopes these critical years of preadolescent development will be productive for both our children and our dedicated professional educators and school staffs. General recommendations will be offered first. Specific recommendations for F.B. Leon Guerrero will follow.

General Recommendations

It is recommended that the Director of Education convene a task force of middle school administrators, curriculum specialists, central office division personnel, (curriculum and instruction, secondary, planning and evaluation, special education, and inservice training), and teachers to review the results of the evaluation study and develop action plans that focus on the various middle school practices considered important to the implementation of a true middle school program.

It is further recommended that the Territorial Board of Education:

1. Fully support the Interdisciplinary Model used at F.B. Leon Guerrero. Faculty and staff at that school should be commended for putting together a school program that has had a positive impact on student self esteem, basic skill achievement, and attendance. The program deserves to be able to shed its "pilot phase" label.

2. Conduct a detailed middle school policy analysis with an eye towards incorporating policies relative to the middle school. This analysis ought to also include revision of middle school certification requirements for teachers and administrators.

3. Submit formal course proposals to the University of Guam that address the revised middle school teacher and administrator certification requirments.

4. Develop a middle school statement of philosophy and goals that address the unique emotional, social, academic and physical needs of the middle school student.

5. Develop and adopt district wide standards and goals for middle schools.

6. Encourage adoption of the interdisciplinary model, or appropriate variation of that model, in all Guam middle schools.

7. Review middle school guidance and advisement practices and the role of the guidance counselor with an eye towards incorporating aspects of guidance and advisement practices that correlate highly with successful middle school practices.

8. Support the Implementation of a comprehensive district wide program of intramurals for the middle schools that is coordinated and funded by the district. The model used by F.B. Leon Guerrero should be used as a guide when formulating this program. It is also important that representatives from each middle school be involved in the planning of the program and the district willing to compensate teachers who coordinate the program in the schools.

9. Periodically (every two to three years) conduct middle school evaluations that focus on student academic (core curricula and exploratory courses), social, emotional and physical needs and outcomes.

10. Immediately conduct a formal needs assessment of middle school social studies, health and physical education programs.

11. Each middle school annually conduct a formative evaluation of practices and programs that would include information on student attendance, achievement, suspensions, discipline referrals, costs, teacher morale, etc.

12. Develop formal inservice training courses for middle school teaches and administrators that would include: middle school concepts, learning styles of children, culturally responsive teaching, integrating curriculum across the content areas, teaching styles (models of teaching), and middle school advisement for teachers.

13. Endorse and support a program of mini-courses at the middle school level that would take advantage of teacher special interests and expertise as well as address

student interests.

14. Consider making the distinction between secondary (high school) programs and the transitional middle schools more pronounced. This could be accomplished by creating an assistant superintendent for middle schools position and negotiating labor contracts with middle school student needs in mind.

15. Take the necessary steps to strengthen administrative leadership skills that are related to implementation of a true middle school.

16. Periodically monitor teacher morale and satisfaction with worksite conditions in middle schools.

17. Take steps to formally increase communication among middle schools on Guam so that successful practices may be shared.

18. Require each middle school to develop a five year plan for addressing important aspects identified in the discrepancy analysis. Middle schools should be cautioned to start out slowly with interested teachers on a pilot basis.

19. Develop middle school teacher and administrator certification standards separate from high schools.

20. Provide for all middle schools to join a national organization of middle schools. The State of Hawaii has offered to let Guam middle schools join the Hawaii Association of Middle Schools (HAMS). There are also national organizations that Guam is eligible to join.

21. Provide a graduate level middle school overview course for all middle school teachers and administrators.

Recommendations for F.B. Leon Guerrero Middle School

It is recommended that F. B. Leon Guerrero Middle School:

1. Review the interdisciplinary model with an eye towards providing a more gradual transition from elementary school. Determine the level of support seventh and eighth grade teachers have with respect to the interdisciplinary model and provide training where necessary to support the model.

2. Re-survey students in the school relative to the social studies curriculum.

3. Explore various means for involving parents in the school.

4. Continue the annual evaluation activity that monitors student attendance, self esteem, faculty morale and satisfaction with work site conditions, and basic skill

achievement.

5. Increase the amount of shared decision-making at the school by providing a mechanism for parents to become involved in advisory councils.

6. Determine the aspects of the school that are particularly problematic for military dependents and increase the frequency of orientations for incoming and new middle school students.

7. Begin a program of student sponsorship for newly arrived students be instituted to help promote an understanding of Guam schools and expectations. The excellent orientation program the school uses could be expanded and offered to all students new to the school, not just incoming sixth graders.

8. Determine what students define as "help" and what teachers can do to give more help or teachers need to explain why students should be able to do more on their own.

9. Increase the frequency of classroom visits to observe instruction by the administrators.

10. Focus staff development programs on:

- integration of thinking skills into core curricular areas
- increasing communication among the various grade levels and teams
- methods for inquiry teaching
- methods for independent study

Appendix "A"

Research, Planning, and Evaluation
Government of Guam
Department of Education
P.O. Box DE, Agana, Guam 96910
Phone (671) 472-8901
Telefax No. (671) 477-9666

Anita A. Sukola
Director

Jeffrey E. Shafer Ed.D.
Administrator

April 27, 1990

MEMORANDUM

TO: All Middle School Principals
All Middle School Assistant Principals

FROM: Chairman, Middle School Evaluation Task Force

SUBJECT: Survey of Middle School Practices and Ideas

Each middle school administrator should complete the attached survey form. The Task Force apologizes for the length of the survey, but sincerely believes the administration of the survey will provide invaluable information on middle school organization and practices.

Please note that all teachers in your school have also been asked to complete the same survey. Your survey as well as the teacher survey are due May 11, 1990. Please make sure everyone has a chance to provide input into the middle school evaluation process. Thank you for your cooperation.

JEFF SHAFER

Attachment

INSTRUCTIONS FOR COMPLETING THE SURVEY OF MIDDLE SCHOOL PRACTICES AND IDEAS©

All Middle School Teachers and All Middle School Administrators

Introduction

The following survey of middle school practices and ideas has been developed and approved by the Task Force responsible for evaluating F.B. Leon Guerrero Middle School. One major focus of the evaluation involves determining how *all* of Guam's middle schools are organized, their salient features, and whether or not certain aspects alleged to be characteristic of good middle schools in national research literature are, in fact, important to practitioners in Guam's middle school classrooms and schools.

The Survey of Middle School Practices and Ideas has been developed to elicit two types of data about middle schools on Guam. You will be asked to judge each aspect on its IMPORTANCE for Guam middle schools and the extent each aspect exists (EXISTENCE) in *your* middle school.

Instructions

Read each statement carefully; mark how important you believe the aspect is for Guam's middle schools. Do not skip any item or leave any blanks. Next, mark the extent the aspect exists in your middle school. Look at the following fictitious sample statement:

	Importance					Existence				
	PRIORITY 5	VERY IMPORTANT 4	IMPORTANT 3	SOMEWHAT IMPORTANT 2	NOT IMPORTANT 1	ALWAYS 5	USUALLY 4	SOMETIMES 3	RARELY 2	NEVER 1
Teachers in my school grade on the curve.	○	○	○	○	○	○	○	○	○	○

If you believe grading on the curve to be very important you would check (✓) or darken the circle in the VERY IMPORTANT column under the IMPORTANCE category. If, on the other hand, you knew of very few teachers who graded on the curve in your school you would check (✓) or darken the circle in the RARELY column under the EXISTENCE category.

Please note that you responses are to be used for statistifcal purposes only. Therefore I ask that you not write your names on the survey and that you return it to your school principal no later than the morning of May 11, 1990. Thank You!

Lourdes S.N. Boyd

Associate Superintendent Secondary Schools

Page 1 of 8

Middle School Survey of Practices and Ideas

	Importance					Existence				
I. Guidance and Advisement	PRIORITY 5	VERY IMPORTANT 4	IMPORTANT 3	SOMEWHAT IMPORTANT 2	NOT IMPORTANT 1	ALWAYS 5	USUALLY 4	SOMETIMES 3	RARELY 2	NEVER 1
1. This school employs a "homebase" teacher advisement program.	○	○	○	○	○	○	○	○	○	○
2. The advisement program provides 15 or more minutes per day for advising students.	○	○	○	○	○	○	○	○	○	○
The advisement program in this school formally deals with (Question 3-7):										
3. peer relationships and social aspects	○	○	○	○	○	○	○	○	○	○
4. self esteem and personal aspects	○	○	○	○	○	○	○	○	○	○
5. career orientation	○	○	○	○	○	○	○	○	○	○
6. academic guidance	○	○	○	○	○	○	○	○	○	○
7. human sexuality	○	○	○	○	○	○	○	○	○	○
The advisement program has goals of (Questions 8-16):										
8. increasing teacher's personal knowledge of each student	○	○	○	○	○	○	○	○	○	○
9. allowing students to get to know teachers better	○	○	○	○	○	○	○	○	○	○
10. increasing student motivation and learning	○	○	○	○	○	○	○	○	○	○
11. providing opportunities for group discussion and decision-making	○	○	○	○	○	○	○	○	○	○
12. promoting self-understanding and character development	○	○	○	○	○	○	○	○	○	○
13. the role of the guidance counselor is clear and unambiguous	○	○	○	○	○	○	○	○	○	○
14. Guidance counselors in this school spend little or no time scheduling pupils	○	○	○	○	○	○	○	○	○	○
15. Guidance counselors in this school spend a majority of time working with children in small groups	○	○	○	○	○	○	○	○	○	○
16. Each student has an assigned teacher advisor	○	○	○	○	○	○	○	○	○	○

	Importance					Existence				
	PRIORITY 5	VERY IMPORTANT 4	IMPORTANT 3	SOMEWHAT IMPORTANT 2	NOT IMPORTANT 1	ALWAYS 5	USUALLY 4	SOMETIMES 3	RARELY 2	NEVER 1
II. Organization for Instruction and Teaching Strategies										
17. Teachers are assigned to a team that share a common group of students	○	○	○	○	○	○	○	○	○	○
18. Teachers on a team plan units of instruction together	○	○	○	○	○	○	○	○	○	○
19. Teacher teams can change their own schedule according to student needs	○	○	○	○	○	○	○	○	○	○
20. Students are grouped with others of varying or different ability levels	○	○	○	○	○	○	○	○	○	○
21. Instruction emphasizes critical thinking skills	○	○	○	○	○	○	○	○	○	○
22. Instruction emphasizes a basic core of skills to be learned	○	○	○	○	○	○	○	○	○	○
23. Teachers use assessment results in planning instruction and setting goals	○	○	○	○	○	○	○	○	○	○
24. The school promotes small group cooperative learning experiences	○	○	○	○	○	○	○	○	○	○
25. The school schedule is conducive to interdisciplinary teaching and teaming	○	○	○	○	○	○	○	○	○	○
School Staff have received or will receive training in: Questions 26-37										
26. Mastery Learning	○	○	○	○	○	○	○	○	○	○
27. Learning Styles of children	○	○	○	○	○	○	○	○	○	○
28. Cooperative learning	○	○	○	○	○	○	○	○	○	○
29. Effective teaching	○	○	○	○	○	○	○	○	○	○
30. Culturally responsive teaching	○	○	○	○	○	○	○	○	○	○
31. Teaching styles	○	○	○	○	○	○	○	○	○	○
32. Independent study	○	○	○	○	○	○	○	○	○	○

	Importance					Existence				
	PRIORITY 5	VERY IMPORTANT 4	IMPORTANT 3	SOMEWHAT IMPORTANT 2	NOT IMPORTANT 1	ALWAYS 5	USUALLY 4	SOMETIMES 3	RARELY 2	NEVER 1
33. Student advisement	○	○	○	○	○	○	○	○	○	○
34. Inquiry teaching	○	○	○	○	○	○	○	○	○	○
35. Integrating curriculum across the content areas	○	○	○	○	○	○	○	○	○	○
36. Reading in content areas	○	○	○	○	○	○	○	○	○	○
37. Other models/strategies of teaching e.g. synectics. Please specify:__________________	○	○	○	○	○	○	○	○	○	○
38. There is good communication among grade level professional educators	○	○	○	○	○	○	○	○	○	○
39. A first period class is combined with a homeroom period*	○	○	○	○	○	○	○	○	○	○
40. All classes are taught everyday*	○	○	○	○	○	○	○	○	○	○
41. Class periods or "blocks" of time are 40-45 minutes in length*	○	○	○	○	○	○	○	○	○	○
II. Curriculum/Integration										
42. There are elective courses from which 8th grade students choose*	○	○	○	○	○	○	○	○	○	○
43. There is a semester course in family living/health that all students must take*	○	○	○	○	○	○	○	○	○	○
44. The school has a band program as part of the regular school day*	○	○	○	○	○	○	○	○	○	○
45. Science in the 6th grade is a year-long course*	○	○	○	○	○	○	○	○	○	○
46. Social studies in the 6th grade is a year-long course*	○	○	○	○	○	○	○	○	○	○
47. Students have the opportunity to participate in short-term mini-courses	○	○	○	○	○	○	○	○	○	○
48. Curriculum at this school is integrated across the various content areas	○	○	○	○	○	○	○	○	○	○
49. A double period language arts block is used at all grade levels*	○	○	○	○	○	○	○	○	○	○

	Importance					Existence				
	PRIORITY 5	VERY IMPORTANT 4	IMPORTANT 3	SOMEWHAT IMPORTANT 2	NOT IMPORTANT 1	ALWAYS 5	USUALLY 4	SOMETIMES 3	RARELY 2	NEVER 1
50. Physical Education is offered every year*	○	○	○	○	○	○	○	○	○	○
IV. Transition/Orientation										
51. A program for orienting new students to the school exists	○	○	○	○	○	○	○	○	○	○
52. Parents are provided an orientation to the philosophy and goals of the school	○	○	○	○	○	○	○	○	○	○
53. Incoming or new middle school students are assigned a peer or a mentor	○	○	○	○	○	○	○	○	○	○
54. Parents have the opportunity to visit classes and are routinely invited to do so	○	○	○	○	○	○	○	○	○	○
55. Time is provided teachers to visit or phone students who enrollin the school	○	○	○	○	○	○	○	○	○	○
56. Teachers routinely call parents of students	○	○	○	○	○	○	○	○	○	○
57. A formal program for orienting students to the high schools exists at this school	○	○	○	○	○	○	○	○	○	○
58. Orientation to the middle school is scheduled periodically throughout the year	○	○	○	○	○	○	○	○	○	○
59. This school's organization provides a gradual transition from a self-contained elementary type program to departmentalized 8th grade*	○	○	○	○	○	○	○	○	○	○
V. Exploratory and Mini-Courses										
60. The school provides for semester long exploratory courses in a variety of areas*	○	○	○	○	○	○	○	○	○	○
Exploratory courses are offered in the following areas: (Questions 61-67)*	○	○	○	○	○	○	○	○	○	○
61. Chamorro Language	○	○	○	○	○	○	○	○	○	○
62. Career Education	○	○	○	○	○	○	○	○	○	○

	Importance					Existence				
	PRIORITY 5	VERY IMPORTANT 4	IMPORTANT 3	SOMEWHAT IMPORTANT 2	NOT IMPORTANT 1	ALWAYS 5	USUALLY 4	SOMETIMES 3	RARELY 2	NEVER 1
63. Music/Chorus	○	○	○	○	○	○	○	○	○	○
64. Family Living/Health	○	○	○	○	○	○	○	○	○	○
65. Art	○	○	○	○	○	○	○	○	○	○
66. Band	○	○	○	○	○	○	○	○	○	○
67. The school should try to offer other exploratory courses in the areas of (please list):________________ ________________	○	○	○	○	○	○	○	○	○	○
68. Short-term, mini-courses of 2-3 weeks are periodically offered	○	○	○	○	○	○	○	○	○	○
69. Short term, mini-courses take advantage of special teacher interests	○	○	○	○	○	○	○	○	○	○
VI. Intramurals Athletics and Extracurricular Activities										
70. The school provides for a comprehensive program of intramural athletics	○	○	○	○	○	○	○	○	○	○
71. All students are provided an opportunity to participate in athletics	○	○	○	○	○	○	○	○	○	○
72. Students are provided opportunities to compete against other middle schools	○	○	○	○	○	○	○	○	○	○
Intramurals offered at this school include: (Questions 73-80)										
73. soccer	○	○	○	○	○	○	○	○	○	○
74. basketball	○	○	○	○	○	○	○	○	○	○
75. volleyball	○	○	○	○	○	○	○	○	○	○
76. softball	○	○	○	○	○	○	○	○	○	○
77. bowling	○	○	○	○	○	○	○	○	○	○
78. tennis	○	○	○	○	○	○	○	○	○	○

	Importance					Existence				
	PRIORITY 5	VERY IMPORTANT 4	IMPORTANT 3	SOMEWHAT IMPORTANT 2	NOT IMPORTANT 1	ALWAYS 5	USUALLY 4	SOMETIMES 3	RARELY 2	NEVER 1
79. kickball	○	○	○	○	○	○	○	○	○	○
80. other________________________	○	○	○	○	○	○	○	○	○	○
81. A program of student government provides opportunities for students to practice and learn principles of democracy	○	○	○	○	○	○	○	○	○	○
82. Students are elected to the student government by their peers	○	○	○	○	○	○	○	○	○	○
83. A variety of clubs, activities and other extracurricular programs exist for students at the school	○	○	○	○	○	○	○	○	○	○
VII. Administrative Leadership										
84. The principal is "highly visible" throughout the school	○	○	○	○	○	○	○	○	○	○
85. Resources needed to ensure the effectiveness of instructional programs are available and allocated according to established instructional priorities	○	○	○	○	○	○	○	○	○	○
86. Classroom visits to observe instruction are done frequently by the administrators	○	○	○	○	○	○	○	○	○	○
87. Leaders involve staff and students in reaching decisions which affect them	○	○	○	○	○	○	○	○	○	○
88. Administrators provide support to teachers on student discipline	○	○	○	○	○	○	○	○	○	○
89. The principal communicates openly and frankly with staff jmembers and students	○	○	○	○	○	○	○	○	○	○
90. School leaders expect all staff to meet high instructional standards	○	○	○	○	○	○	○	○	○	○
91. The principal has a clear understanding of the school's mission and is able to state in direct, concrete terms	○	○	○	○	○	○	○	○	○	○
92. Instructional leaders check student progress frequently, relying on explicit performance data	○	○	○	○	○	○	○	○	○	○
93. The principal evaluates teachers based on criteria which focuses on instructional improvements	○	○	○	○	○	○	○	○	○	○

	Importance					Existence				
	PRIORITY 5	VERY IMPORTANT 4	IMPORTANT 3	SOMEWHAT IMPORTANT 2	NOT IMPORTANT 1	ALWAYS 5	USUALLY 4	SOMETIMES 3	RARELY 2	NEVER 1
94. Learning time is protected from disruption	○	○	○	○	○	○	○	○	○	○
95. The principal effectively runs meetings which have a clear agenda; and where discussion is limited to relevant topics	○	○	○	○	○	○	○	○	○	○
96. The principal encourages staff members to solve their own problems, but is available for assistance if needed	○	○	○	○	○	○	○	○	○	○
97. The administration, faculty and other professional staff meet each to evaluate the instructional, extracurricular and guidance programs at the school	○	○	○	○	○	○	○	○	○	○
98. The results of this evaluation are used to improve the school program for the next school year	○	○	○	○	○	○	○	○	○	○
Decision-Making Processes in Middle Schools (Questions 99-105)										
99. Planning is a collaborative process involving administrators, teachers, and other professional staff	○	○	○	○	○	○	○	○	○	○
100. Parents, students, community members have input into the planning process	○	○	○	○	○	○	○	○	○	○
101. Faculty are regularly involved or consulted about hiring of prospective teachers or educators	○	○	○	○	○	○	○	○	○	○
102. Collaborative decision-making exist within the building	○	○	○	○	○	○	○	○	○	○
103. School leaders involve staff and students in reaching decisions which affect them	○	○	○	○	○	○	○	○	○	○
104. Parents and community members are involved in school decisions through advisory committees or other means (PTO/PTA)	○	○	○	○	○	○	○	○	○	○
105. Students have input into the development and implementation of the school's written discipline policy	○	○	○	○	○	○	○	○	○	○

Please continue with the next page. Answer all items, please do not leave blanks.

1.. Circle the extent you believe the programs at your school provide for the unique social needs of children who attend the school?

No Provisions									**Excellent Provisions**
1	2	3	4	5	6	7	8	9	10

2. Circle the extent you believe the programs at your school provide for the unique emotional needs of the children who attend the school?

No Provisions									**Excellent Provisions**
1	2	3	4	5	6	7	8	9	10

3. Circle the extent you believe the programs at your school provide for the unique academic needs of the children who attend the school?

No Provisions									**Excellent Provisions**
1	2	3	4	5	6	7	8	9	10

4. Circle the extent you believe the programs at your school provide for the unique physical/development needs of the children who attend the school?

No Provisions									**Excellent Provisions**
1	2	3	4	5	6	7	8	9	10

5. On a scale of 1 (no implementation) to 10 (total implementation), to what extent do you believe your school has implemented a "true" middle school

No Implementation									**Total Implementation**
1	2	3	4	5	6	7	8	9	10

Middle School Administrator Survey©

SCHOOL:________________________

1. Attach a copy of your school's master schedule to this survey.

2. How many guidance counselors do you presently have on your staff? ______ Of these how many are certified guidance counselors? __________

3. Estimate the percent at each grade level who take Physical Education:

6th ______%
7th ______%
8th ______%

4. Please explain your Physical Education program in detail. Use additional sheets or the reverse of this page if necessary.

____

____

5. Please explain your intramural program in detail (before school, during lunch or after school, how staffed, be sure to include objectives of your program and how it is managed). Use additional sheets if necessary.

6. List the number and percent of teachers who fit into the following categories: (count teachers more than once if more than one degree held)

Elementary Teaching Degree		Secondary Teaching Degrees (e.g. math, science, English)		Guidance Counselling Degree	
N	%	N	%	N	%

7. Please indicate the number and percentage of teachers in each of the following categories:

Elementary Certification		Secondary Certification		Dual Certification (Both)		TOTAL FACULTY*
N	%	N	%	N	%	N

*This total should be a non-duplicated count of teachers, counselors, librarians working at your school

8. Describe how your school deals with promotion and retention for middle school students. For example, what criteria does a middle school student need to meet in order to be promoted. Does your school have a Retention Committee? If so please describe how this committee functions. Please use additional sheets as necessary.

13. Please provide the following information for the years indicated:

1983-84: Total Students Retained:_______ :Number retained one year ______: Number retained two years ______: Number retained more than two years. _______
1987-88: Total Students Retained:_______ :Numberretained one year ______: Number retained two years ______: Number retained more than two years. _______
1988-89: Total Students Retained:_______ :Number Retained one year ______: Number retained two years ______:Number retained more than two years. _______

14. Describe the nature and extent of your guidance and counseling program (include special efforts designed to use the guidance counselor or other programs of advisement, facility sponsorship, or other programs you believe that contributes to meeting the goals of the middle school.) Use additional sheets if necessary.

16. Describe the discipline referral process used at your school.

17. Indicate the number of discipline referrals to the office for the past five years at your school.

School Year 1989-90 ____________
School Year 1988-89 ____________
School Year 1987-88 ____________
School Year 1986-87 ____________
School Year 1985-86 ____________

18. Indicate the total number of DAC meetings for each of the five years below

School Year 1989-90 ____________
School Year 1988-89 ____________
School Year 1987-88 ____________
School Year 1986-87 ____________
School Year 1985-86 ____________

19. Indicate the number of suspensions for each of the five years below.

School Year 1989-90 ____________
School Year 1988-89 ____________
School Year 1987-88 ____________
School Year 1986-87 ____________
School Year 1985-86 ____________

20. List at least three exploratory courses you would like to see offered at your school next year.

21. Explain what you believe it would take to implement a system of mini-courses at your school I in time for next year. If you already have one in place, please provide a list of mini-courses your school has offered in the past three years

Question 4. PHYSICAL EDUCATION PROGRAM DESCRIPTION

Question 5. INTRAMURAL PROGRAM DESCRIPTION

Question 8. PROMOTION AND RETENTION:

General Descrition:

Criteria

Question 14. GUIDANCE AND COUNSELING PROGRAM DESCRIPTION

Question 16. DISCIPLINE REFERRAL PROCESS

Guam Department of Education

Middle School Pupil Opinion Survey©

School: ______________________ Date: ________

Place a check mark ( ) under the statement that best tells how you feel about each item. For example, if you think your Social Studies class is too easy, then place a check mark ( ) in the "Too Easy" column. If you do not have a course check the "Does Not Apply" column.

1. Do you feel the teaching is at about the right level for you? How would you rate each of the following subjects?

SUBJECT	Too Dificult	About Right	Too Easy	Does Not Apply
Reading				
Language Arts				
Math				
Social Studies				
Science				
P.E.				
Health				
Art				
Chamorro Language				
Music				
Other? __________				
Other? __________				

2. The middle schools attempt to provide a variety of materials and experiences in each subject to make learning interesting. How would you rate your interest in the following middle school subjects?

SUBJECT:	Very Interested	Interested	Not Interested	Does Not Apply
Reading				
Language Arts				
Math				
Social Studies				
Science				
P.E.				
Health				
Art				
Chamorro Language				
Music				
Other? __________				

3. Rate the following middle school subjects by ranking them in order of importance (1,2,3, etc.) with 1 being most important. Ra nk those in Group I first, then rank those in Group II next, beginning with 1,2,3, etc.

Group I

[ ] Reading
[ ] English
[ ] Spelling
[ ] Math
[ ] Social Studies
[ ] Science

Group II

[ ] P.E.
[ ] Health
[ ] Art
[ ] Music/Band
[ ] Activities (Intramurals)
[ ] Mini-courses

4. If you could determine mini-courses that your school would offer next year, what would they be? For example, a mini-course migh be a short term class offered during an activity period or for only one week in areas such as Personal Living, Drill Team, Chess, Skin Care, Jazzersize, etc. List at least two mini-course topics in which you are interested.

5. When you ask for help in a subject, do you get the necessary help?
[ ] Always [ ] Sometimes [ ] Rarely

Comments:

6. Is enough time given in class to work on assignments?
[ ] Always [ ] Sometimes [ ] Rarely

Comments:

6. If you have a problem that you want to talk to someone about in school, name the adult you would go to (for example, school aide, custodian, teacher, principal, etc.)

8. Are you satisfied with your school? ( ) Yes ( ) No

Comments:

11. If you could change one thing at your school tomorrow, what would you change?

12. If you were to ask your parents what they think of middle school, what do you think they would say?

13. What do you think about the kind of grading used in middle school?

14. How do you feel about the school rules?

15. What would you change about the school rules?

16. To what extent do you feel the school rules are enforced here?

[ ] Too Tough [ ] About Right [ ] Too Easy

Thank you very much for taking the time to complete this survey.
Anilta Sukola, Director of Education

Appendix "B"

INTRUMURAL RULES AND REGULATIONS

1. Each QUAD shall submit no more than 2 teams consisting of a maximum number of students per team. Example: Co-ed volleyball. Each team must have 5 boys and 5 girls equalling 10 students for 1 team.

2. Each quad shall submit the team names using some form of identification. Example: 6C Eaglets and 6C Falcons.

3. One teacher from the quad shall submit the roster on or before the deadline to either Jack Shook or Cheryl Bell (put it in our box). The roster must have the student's name and home room number and the contact teacher's name.

4. Each quad shall appoint a contact teacher. Please be sure that name is also on the roster.

5. The duty of the contact teacher is to submit the roster and inform the team of upcoming games.

6. The contact teacher will be given Intramural Passes the day of the game. The tickets are to be given out to ONLY the team that is playing that day. If someone is absent, PLEASE put the extra ticket(s) in Cheryl's box.

7. The students are to report to their mini course and show the teacher the Pass, then proceed to the Intramural area.

8. Roll call will be taken on the field.

9. The students will remain in intramurals during the hour. They will not report back to their mini course.

10. If any student receives a pass and does not report to intramurals will face the following:

    1st Offense: The home room teacher will be informed. The student will be placed on the skip list.

    2nd Offense: The student will be banned from the present and future intramural activities. The student will be placed on the skip list.

11. All teachers will get a list of participants in the intramural program. Please check to see if people in your mini course are on the list. You can then double check to see if the student is on the list. Remember ONLY THE STUDENTS WITH INTRAMURAL PASSES ARE EXCUSED TO LEAVE MINI COURSES.

Appendix "C"
F.B. LEON GUERRERO MIDDLE SCHOOL
RETENTION COMMITTEE GUIDELINES

I. Guiding Criteria:

A. The guiding criteria for retention is academic failure and/or extreme attendance problems. A student may be a candidate for retention if he/she has failed to achieve adequate academic grades and/or attains excessive absences.

B. The guiding criteria for social promotion is based primarily on the age level of the student.

II. Retention Committee - Membership:

A. The retention committee consists of at least one teacher from each grade; 6th, 7th, and 8th.

B. Includes all counselors of each grade level.

C. A school administrator (serves as committee chair)

III. Functions:

A. Committee members will determine the frequency of meetings. (As decided on January 22, 1988 meeting, the committee will meet once every quarter.)

B. The committee will be responsible for making recommendations on the following:

1. retention of students

2. social promotion of students

C. Recommendations will be given to the Principal.

IV. Retention Criteria:

A. Student is not over-age for that grade level as defined by the following:

6th grade- ages 10-12

7th grade - ages 11-13

8th grade - ages 12-14

Students over these age levels should not be retained and should be considered for social promotion. Student ages are defined as the student's age on or before December 31st of the school year beginning in August of that same year.

B. Students may be retained only once during the middle school years.

C. Students who receive a cumulative average of below 60%. This percentage is based upon averages taken from all four quarters as calculated by the counselors.

D. Student is absent at least ten (10) days per quarter, either excused or unexcused.

E. Students who meet the following criteria will be taken on a case-b-case basis and determination for eligibility for retention will be made by the retention committee.

V. Retention Procedures:

   A. Student is considered for retention if voted as a candidate by a majority of the committee members.

   B. Student and parents must be notified of possible retention (first warning) by midterm, third quarter.

   C. Student and parents must be notified of final retention decision by midterm, fourth quarter.

VI. Social Promotion Criteria:

   A. Student is over-aged (see IVa)

   B. Student was previously retained in the middle school.

   C. There is space available in the next higher grade.

VII. Social Promotion Procedures:

   A. All over-aged children should be identified at the of the prior school year or immediately upon enrollment throughout the present school year.

   B. Student meeting criteria must be voted for social promotion by a majority of the committee members.

   C. Social promotions must take place at the beginning of the following quarter.

   D. Students socially promoted from the elementary grades must take effect at the end of the prior school year. No socially promoted, elementary grade student will be accepted for enrollment once the present school year has commenced.

Retention Committee members as of January 22, 1988:

Manuel Bartonico - Vice Principal
June Caplan - Counselor
Mary Bais - Counselor
Elaine Perez - Counselor
Ana Salas - Teacher
Irene Mafnas - Teacher
Flo Mesa - Teacher

Appendix "D"

Mini-Exploratory Courses Offered the Last Three Years:

Photography
Rocketry
Song Writing
Making throw pillows
Foods Around the World
Basketball
Dancercize
Stunts and Tumbling
Young Astronauts
Jigsaw Puzzles
Spanish
Putting on the Hits
Card Games for Fun
Remote Control Cars
Jazz Ensemble
Typing
Library
Office/Counselor Aides
Painting
Stage Band
Papier-mache
Cooking
Crocheting
Flag football
Soccer
Plastic Canvas Arts
Spanish
Mahjong
Science Club
Classic Film Appreciation
Track and Field
Mini Woodcrafts
Murals
Table Tennis
Disney Films
Picture Frame Making

Calligraphy
Ceramics
Cadet Band
Sewing
Cross Stitching
Softball
Weightlifting
Reading Games
Poi Ball Making
Backgammon
T-shirt Designing
Academic Challenge Bowl
Jewelry making
Tutorial Math
Japanese
Rope Jumping
Anne of Green Gables Series
Arts & Crafts
Cartooning
Origami
Drama
Embroidery
Macrame
Dancing
Golf
Math Games
Poi Balls Club
Chess - Intermediate
Basic First Aid
Comics Club
Knitting
Tennis
German/Russian
By the Sea
Drawing/Sketching

Flag Corps
Guitar
Holiday decorations
Skin Care
Hair braiding
Aerobics
Cheerleading
Computer Literacy
Pictionary
Scrabble
Yearbook Club
Animation
Needlepoint
Honor Band
Drill Team
Video Making
Fantasy Games
Puppetmaking
String Art
Lei making
Rug making
French
Volleyball
Jazzercize
Jogging
BASIC Computer Programming
Chess - Beginning
Mosaic Art
Work-a-holics
Cake Decorating
Model Building
Honor Choir
R.O.T.C.
Race Walking
Coin/Stamp Collecting

Curriculum Outline for the Homebase Program

Sixth Grade

Month	Activity
September	I. Orientation to F.B.L.B. Middle School
	A. Building
	B. Staff
	C. School rules and student handbook
	D. Student schedule
	E. Individual concerns - sharing
October	II. Study and Listening Skills
	A. Note taking
	B. Outlining
November	C. Library
	D. Homework
December	E. Test taking
	III. Looking at Ourselves
	A. Acceptance of Self
January	1. Knowledge of physical changes
February	2. Knowledge of emotional changes
March	3. Knowledge of social changes
April	4. Knowledge of intellectual changes
May	B. Personal Strengths and Weaknesses

Seventh Grade

Month	Activity
September	I. Orientation to F.B.L.B. Middle School
	A. Building
	B. Staff
	C. School rules and student handbook
	D. Student schedule
	E. Individual concerns - sharing
October	II. Understanding Myself
	A. Awareness
	1. Words to describe our feelings
	2. Expression of feelings
	3. Self-Disclosure
	B. Development of desirable personality traits
November	1. Self-confidence
	2. Self-control
	3. Independence
	4. Trust
December	5. Respect for others
	6. Appreciation of other people
	7. Affection
	III. Understanding Others
January	A. Awareness of other people's feelings
February	B. How behavior affects relationships with others
	1. Family
	2. Friends
	3. Teachers
	4. Classmates
March	IV. Awareness of Values
	A. Understanding Values
	B. Exploring personal values
	C. Exploring social values
	1. Honesty
	2. Prejudice
	3. Loyalty
	4. Personal standards
	5. Responsibility
	V. Decision Making
April	A. Steps in decision making
May	B. Personal decision making
	C. Group decision making

Eigth Grade

Month	Activity
September	I. Orientation to F.B.L.B. Middle School
	A. Building
	B. Staff
	C. School rules and student handbook
	D. Student schedule
	E. Individual concerns - sharing
October	II. Decision Making Related to Careers
	A. Review of steps in decision making
	III. Goal Setting
November	A. Steps in goal setting
December	B. Examining types of goals
	1. Long-term
	2. Short term
	C. The relationship between goals
	IV. Interests Related to Careers
January	A. Interest survey
	B. Utilization of ideas
	C. Characteristics of careers
	V. Abilities Related to Careers
February	A. Review of test data
	B. Relationship between abilities and career choices
	VI. Aptitudes Related to Careers
March	A. An overview of aptitudes
	B. Relationship between aptitudes and worker traits
April	VII. Relating School Subjects to Careers
May	VIII. Individual Projects

F.B. Leon Guerrero Middle School
Bell Schedule

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Minicourses	Advisor	Study Hall	Advisor	Minicourses
	Advisee		Advisee	

Monday & Friday	Mini Exploratory Courses
Wednesday	Study Hall

8:05 - 8:10	Homebase
8:10 - 8:15	Locker Time
8:15 - 9:00	1st Period
9:00 - 9:45	2nd Period
9:45 - 10:30	3rd Period
10:30 - 11:15	4th Period

11:15 - 11:45	Lunch A	11:15 - 12:00	5th Period	11:15 - 12:00	5th Period
11:45 - 12:30	5th Period	12:00 - 12:30	Lunch B	12:00 - 12:45	6th Period
12:30 - 1:15	6th Period	12:30 - 1:15	6th Period	12:45 - 1:15	Lunch C

1:15 - 2:00	7th Period
2:00 - 3:00	Mini Exploratory Courses/ Study Hall

Tuesday & Thursday	Advisement Program

8:05-8:10	Homebase
8:10 - 8:35	Advisement
8:35 - 8:40	Locker Time
8:40 - 9:30	6th Period
9:30 - 10:20	7th Period
10:20 - 11:10	3rd Period

11:10 - 11:40	Lunch A	11:10 - 12:00	4th Period	11:10 - 12:00	4th Period
11:40 - 12:30	4th Period	12:00 - 12:30	Lunch B	12:00 - 12:50	5th Period
12:30 - 1:20	5th Period	12:30 - 1:20	5th Period	12:50 - 1:20	Lunch C
		1:20 - 2:10	1st Period		
		2:10 - 3:00	2nd Period		

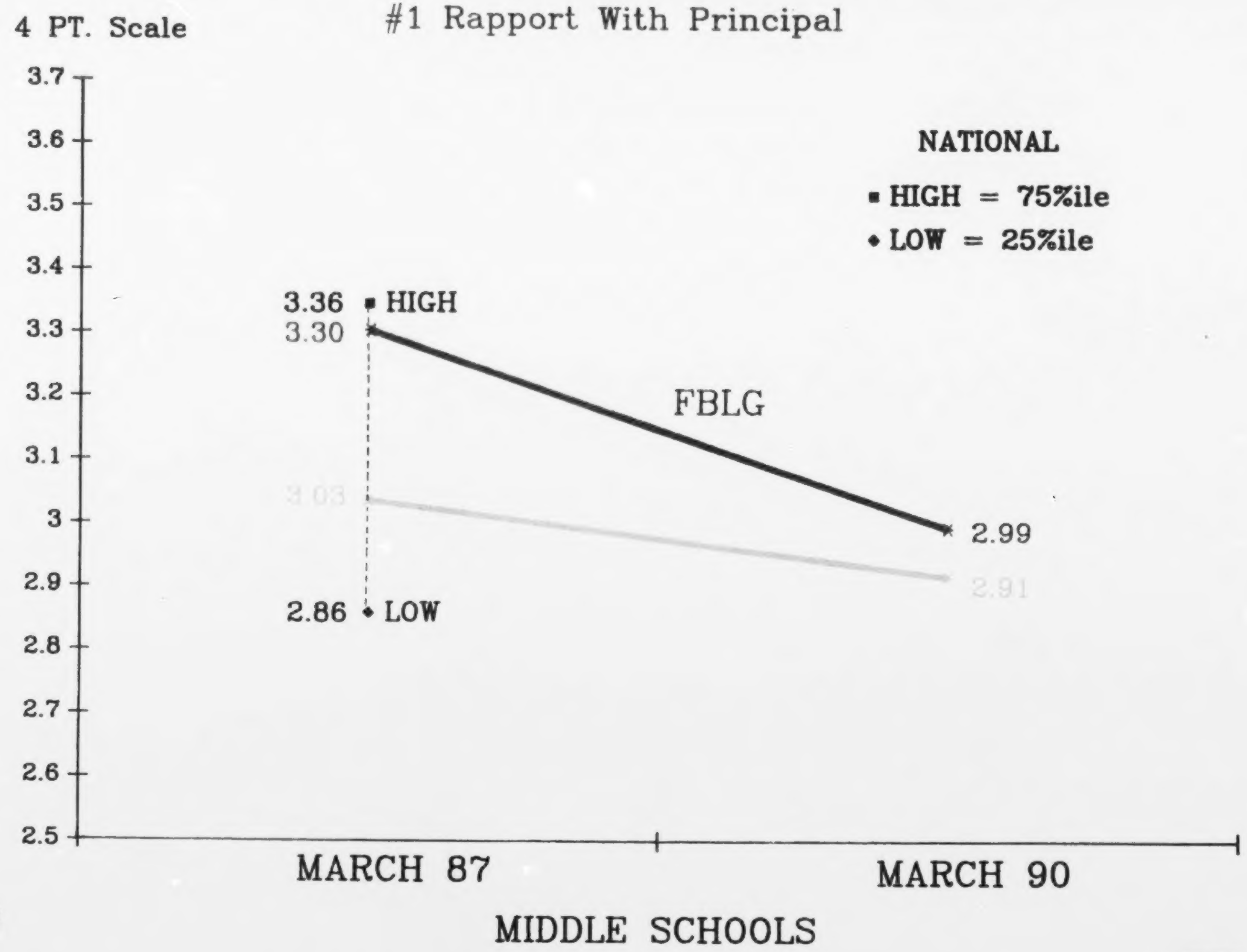
Appendix E

Consists of Twelve Graphs relative to teacher worksite satisfaction and morale in Guam middle schools.

Graph 1 Rapport With Principal E-2
Graph 2 Satisfaction With Teaching E-3
Graph 3 Rapport Among Teaching E-4
Graph 4 Teacher Salary E-5
Graph 5 Teacher Load E-6
Graph 6 Curriculum Issues E-7
Graph 7 Teacher Status E-8
Graph 8 Community Support for Education E-9
Graph 9 School Facilities and Services E-10
Graph 10 Community Pressures (Lack of) E-11
Graph 11 Teacher Morale E-12
Graph 12 Total Satisfaction E-13

GRAPH 1

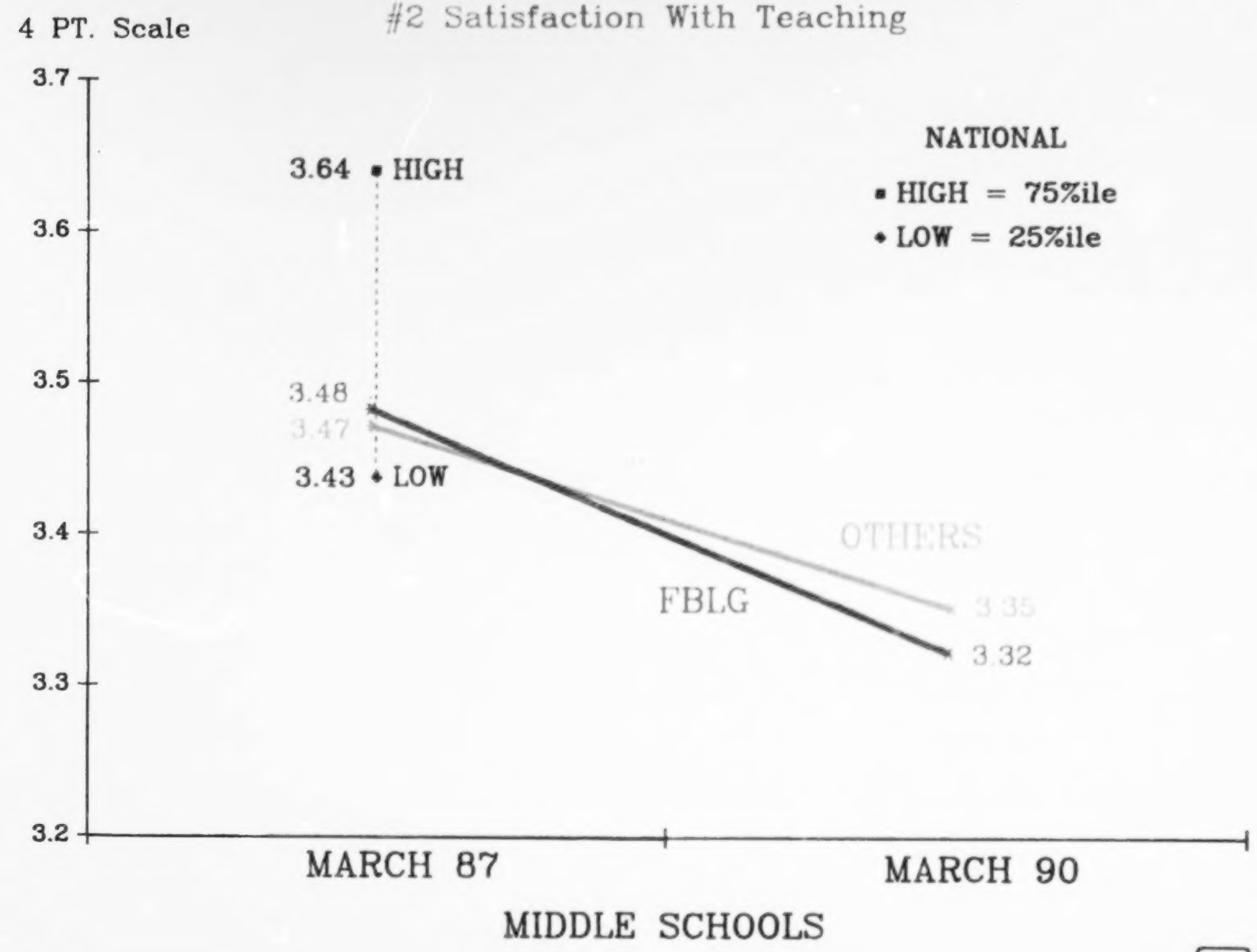
#1 Rapport With Principal



ERIC PT0901

GRAPH 2

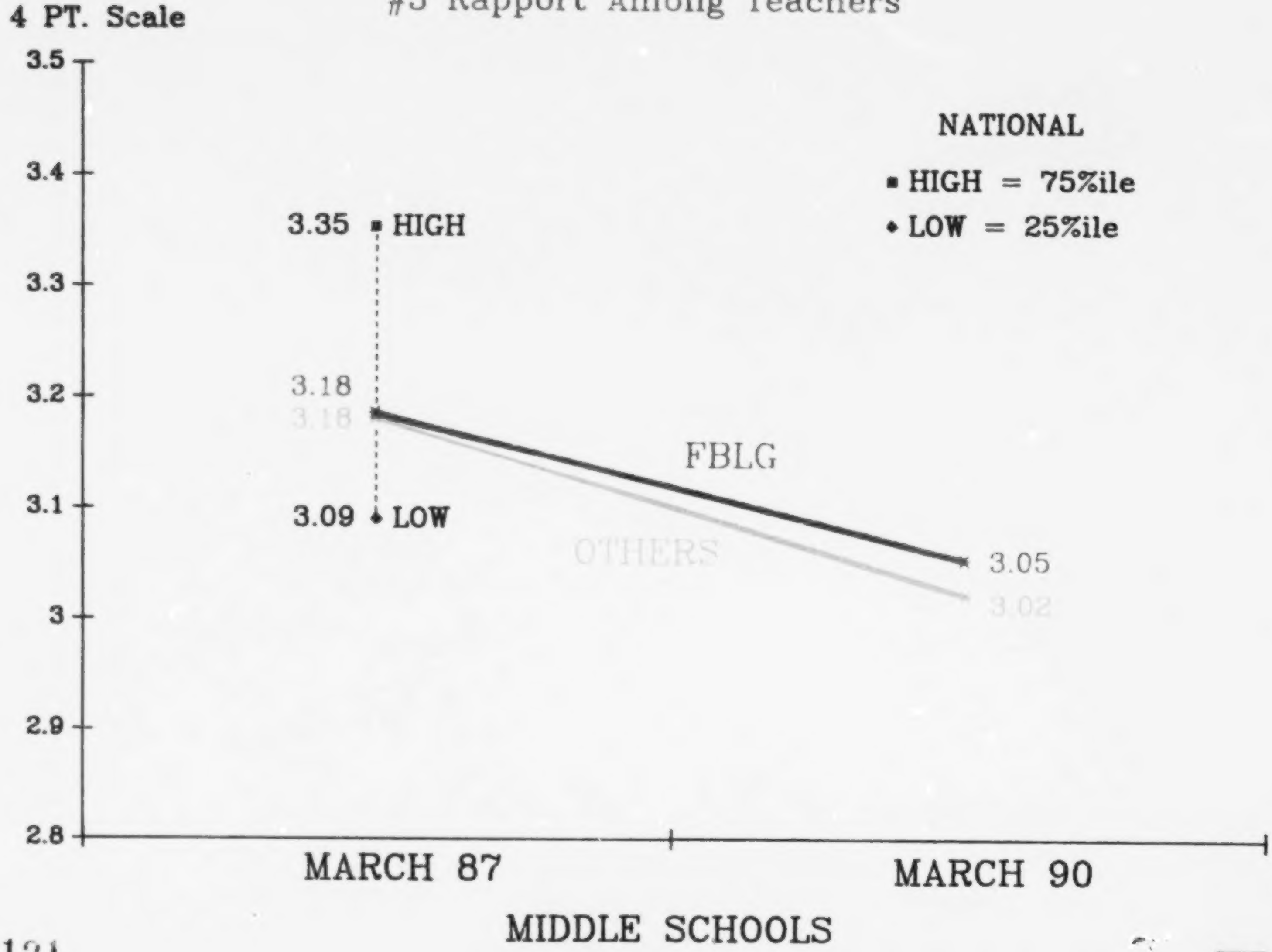
#2 Satisfaction With Teaching



LRC PT0902

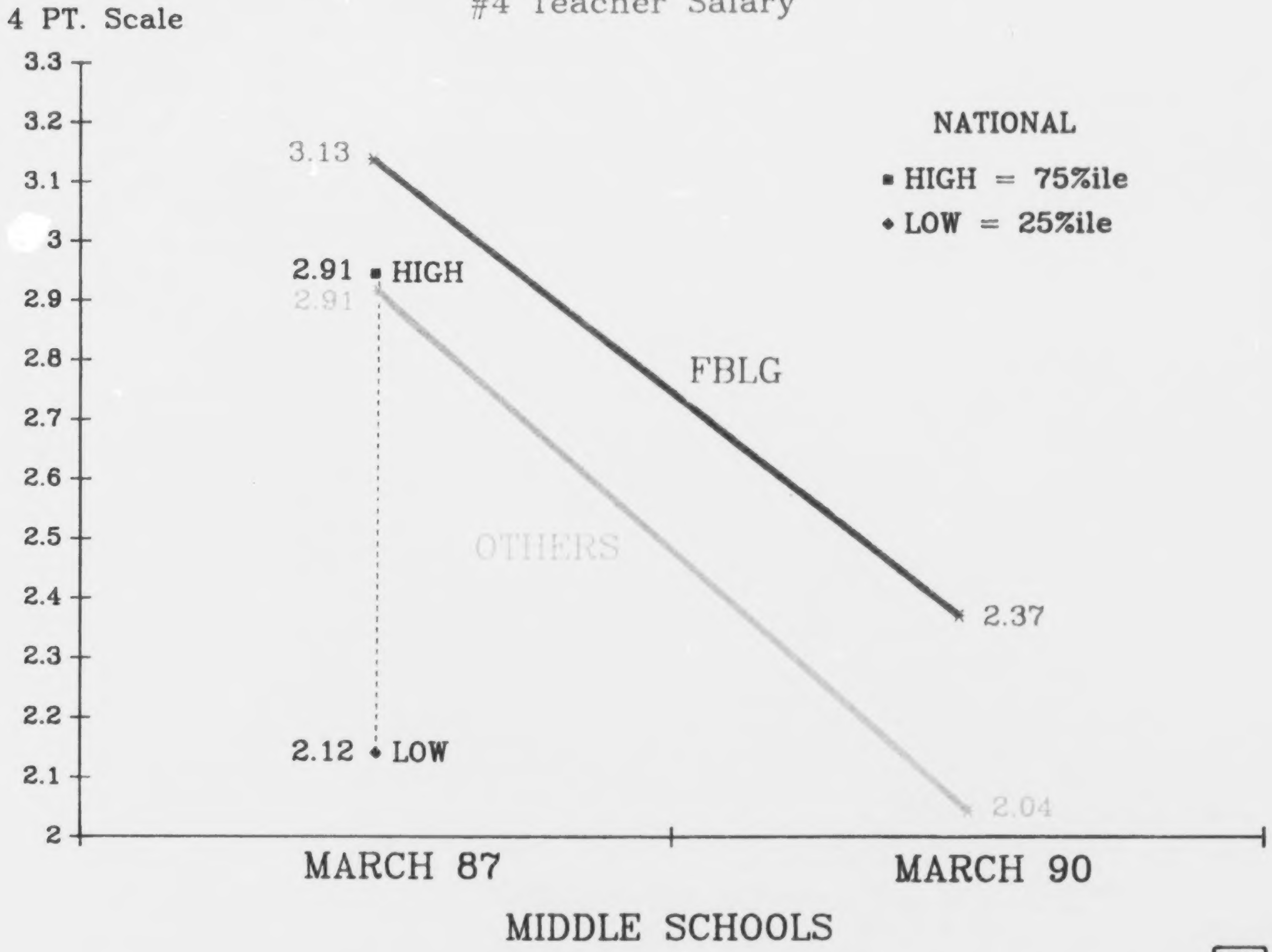
GRAPH 3

#3 Rapport Among Teachers



GRAPH 4

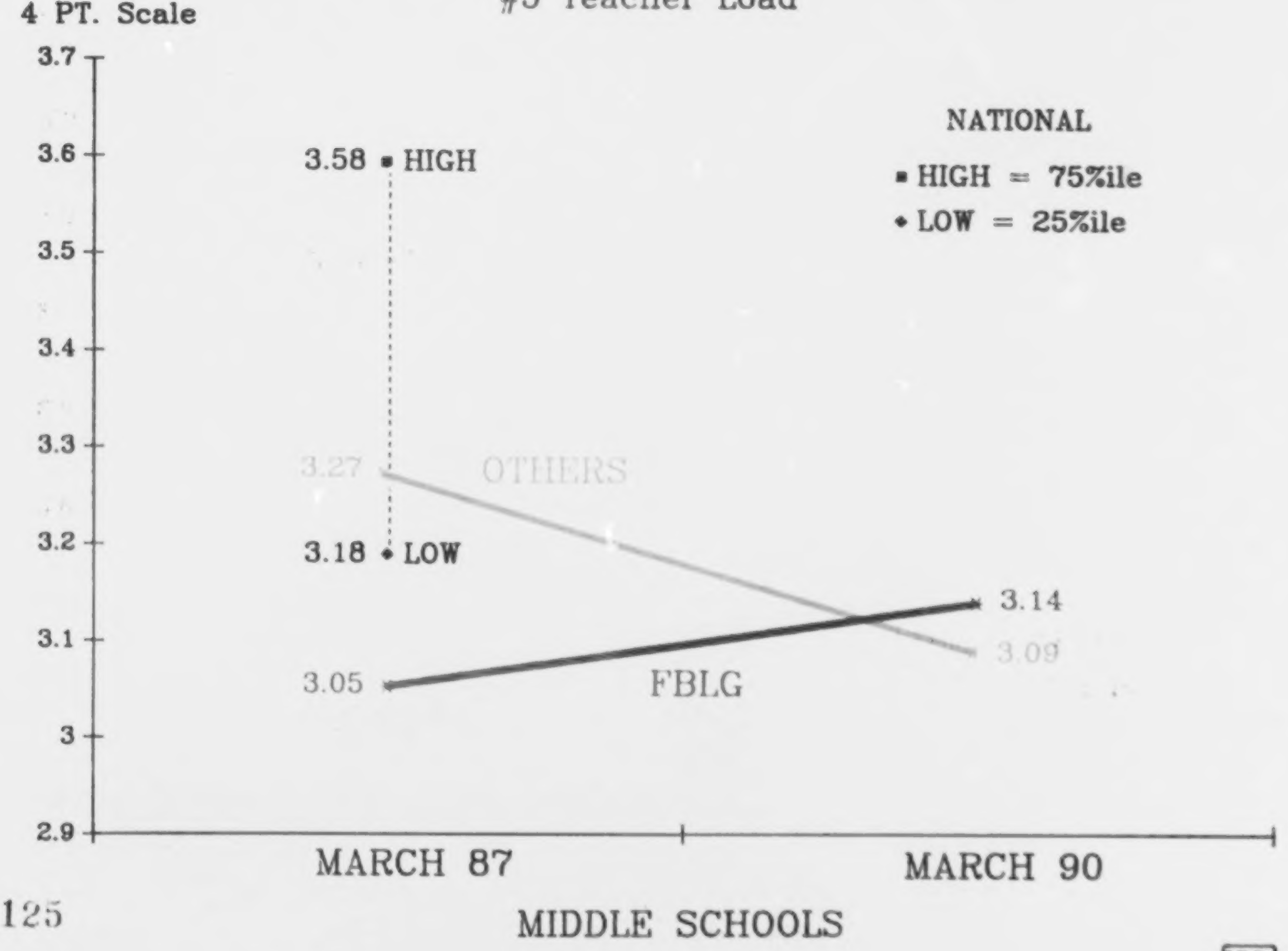
#4 Teacher Salary



LRC PT0904

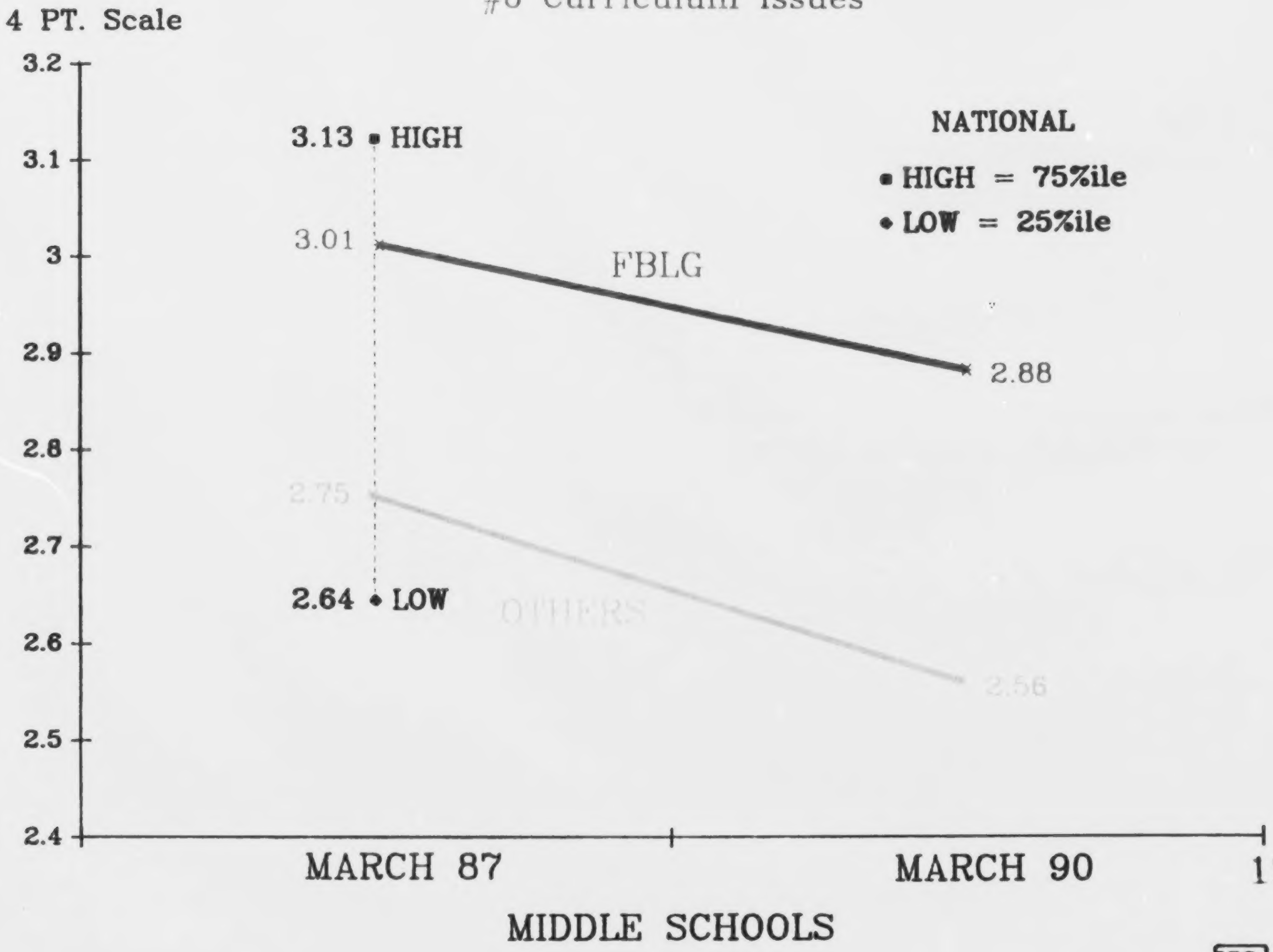
GRAPH 5

#5 Teacher Load



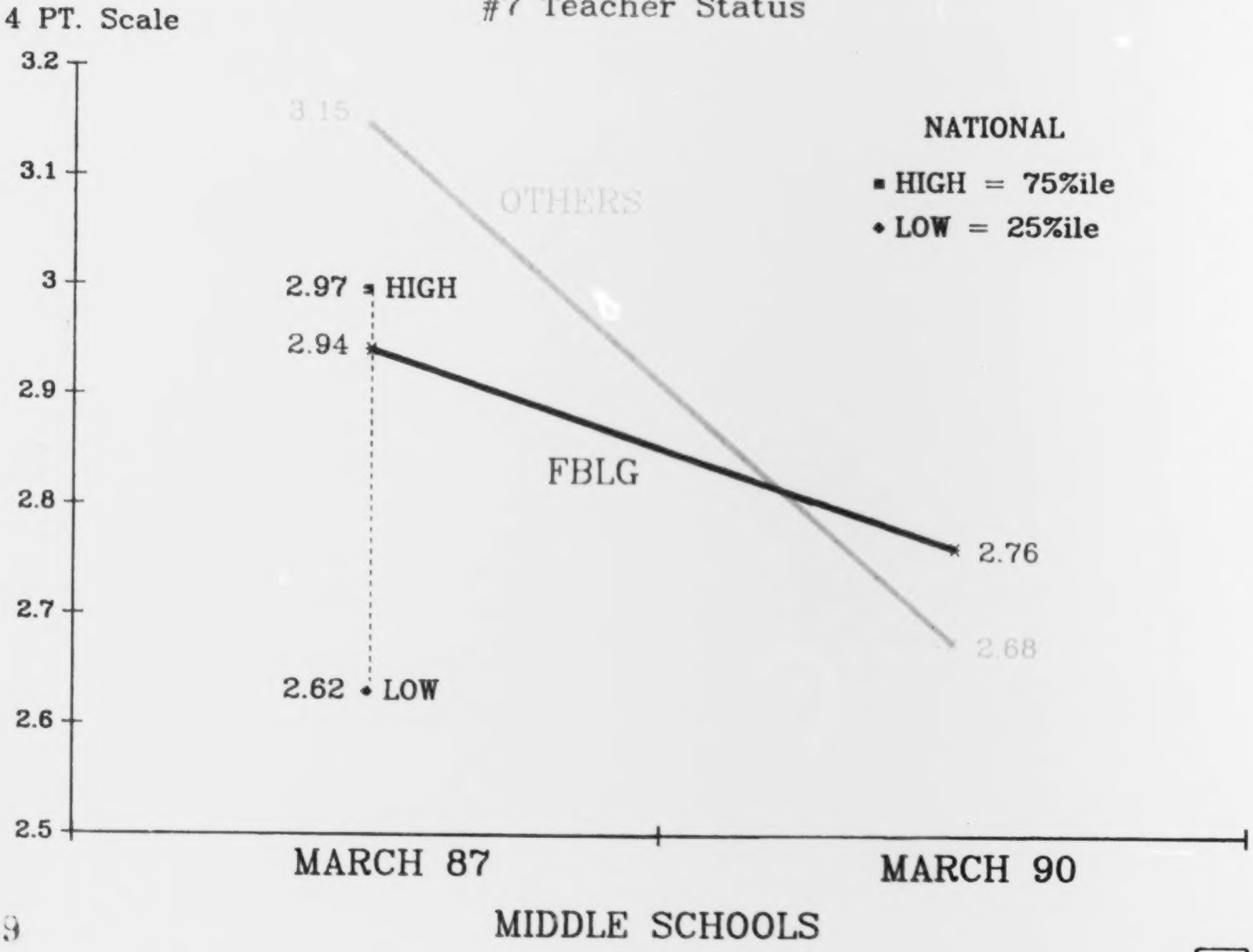
GRAPH 6

#6 Curriculum Issues



GRAPH 7

#7 Teacher Status

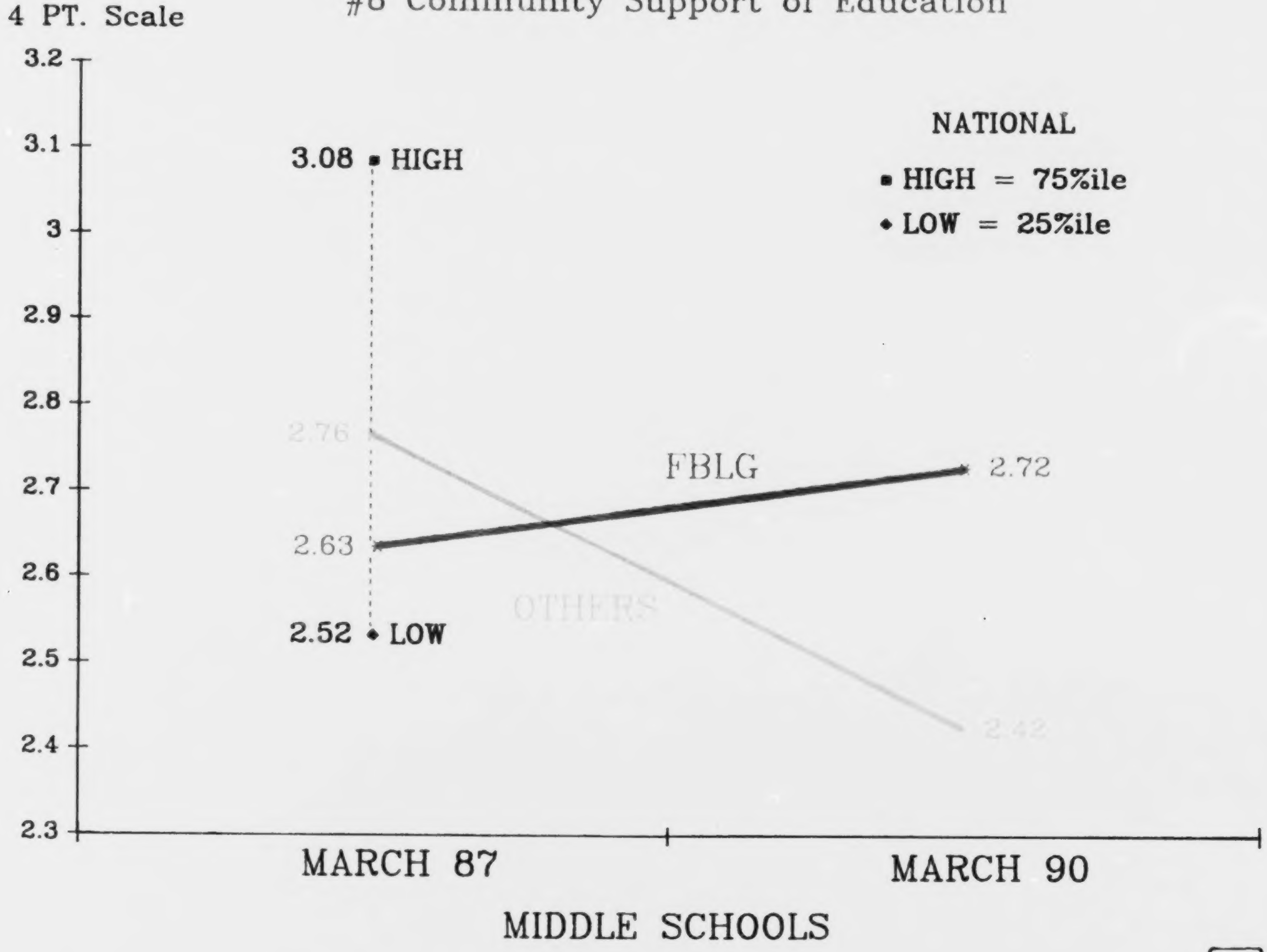


E8

LRC PT0907

GRAPH 8

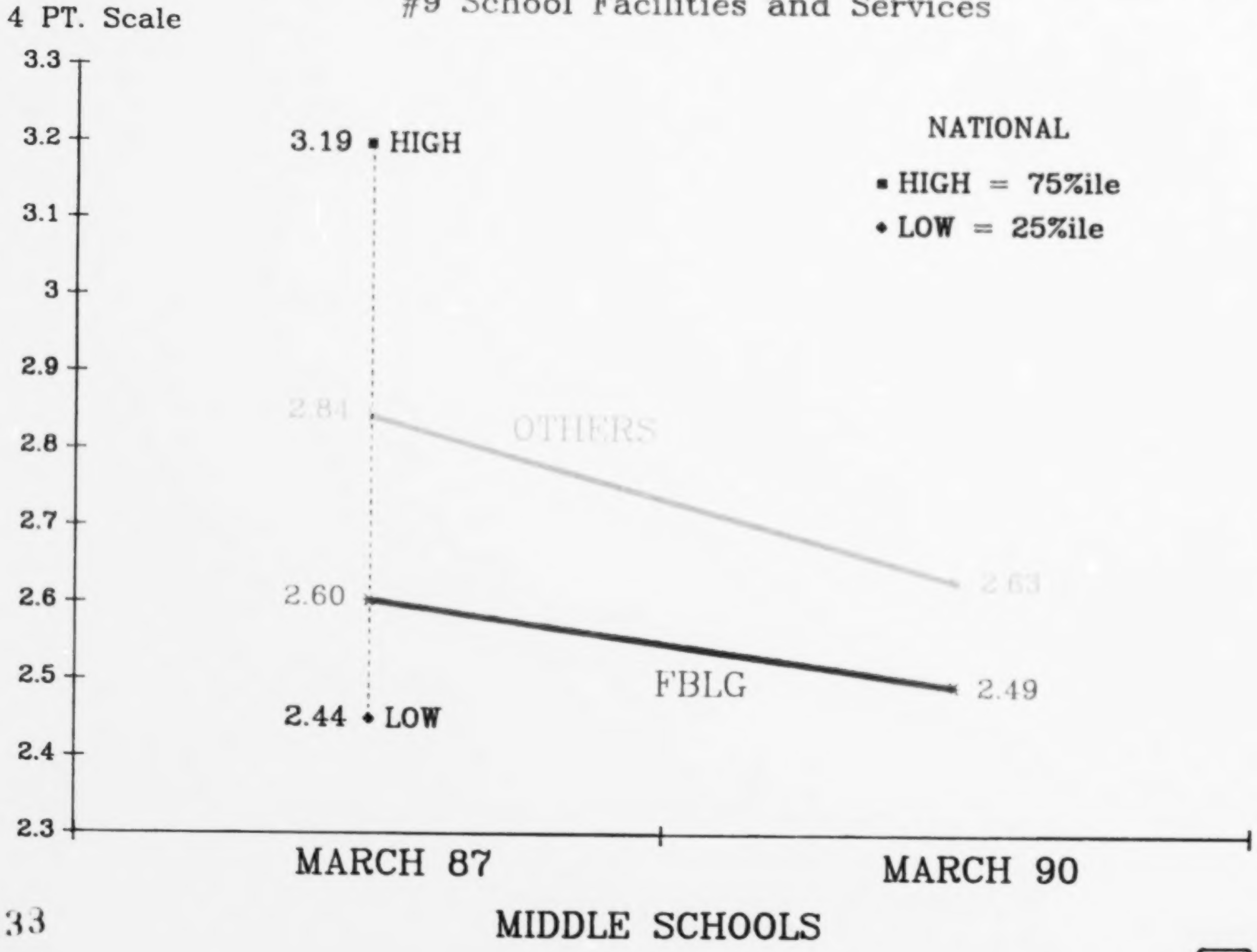
#8 Community Support of Education



LRC PT0908

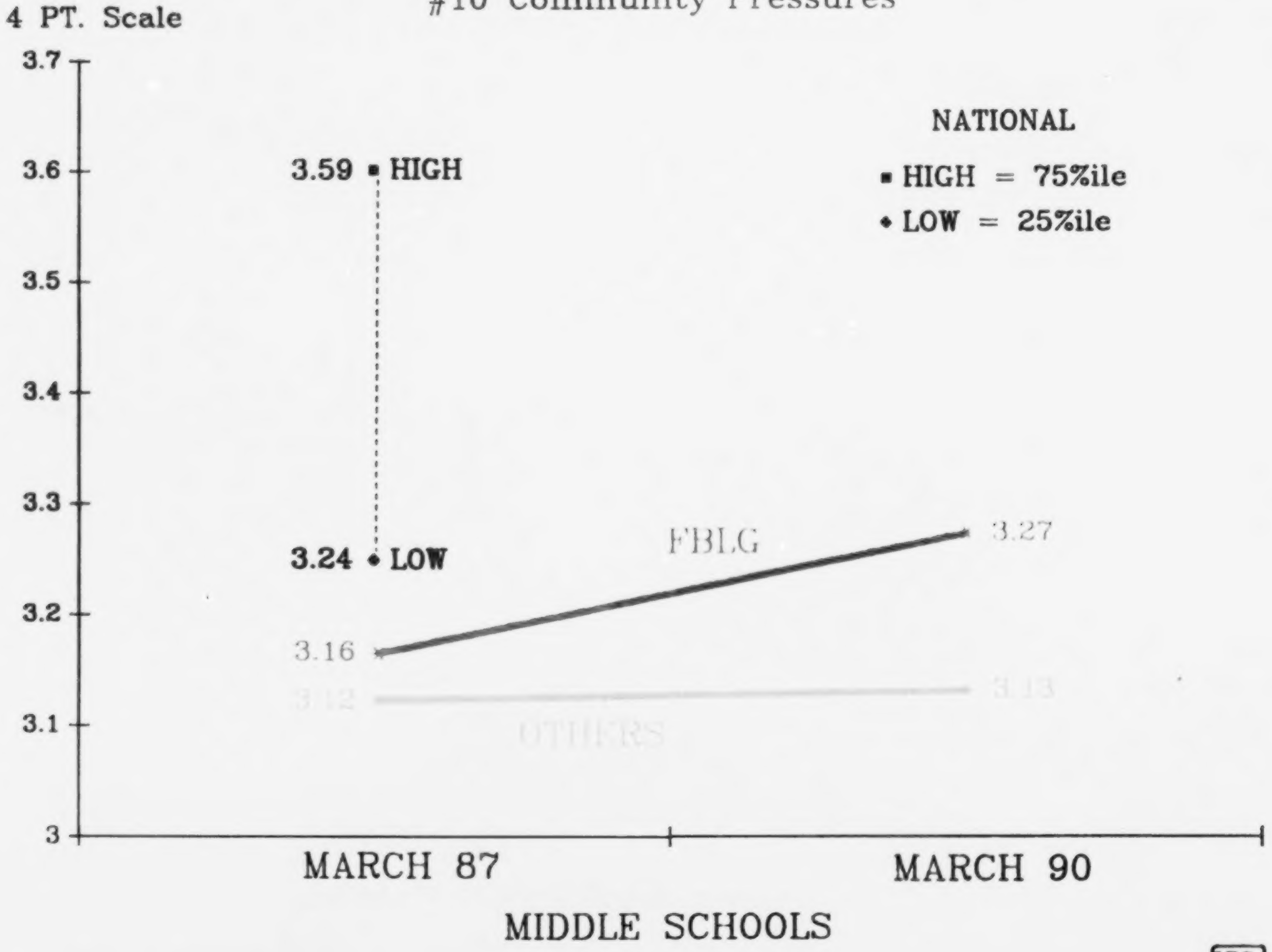
GRAPH 9

#9 School Facilities and Services



GRAPH 10

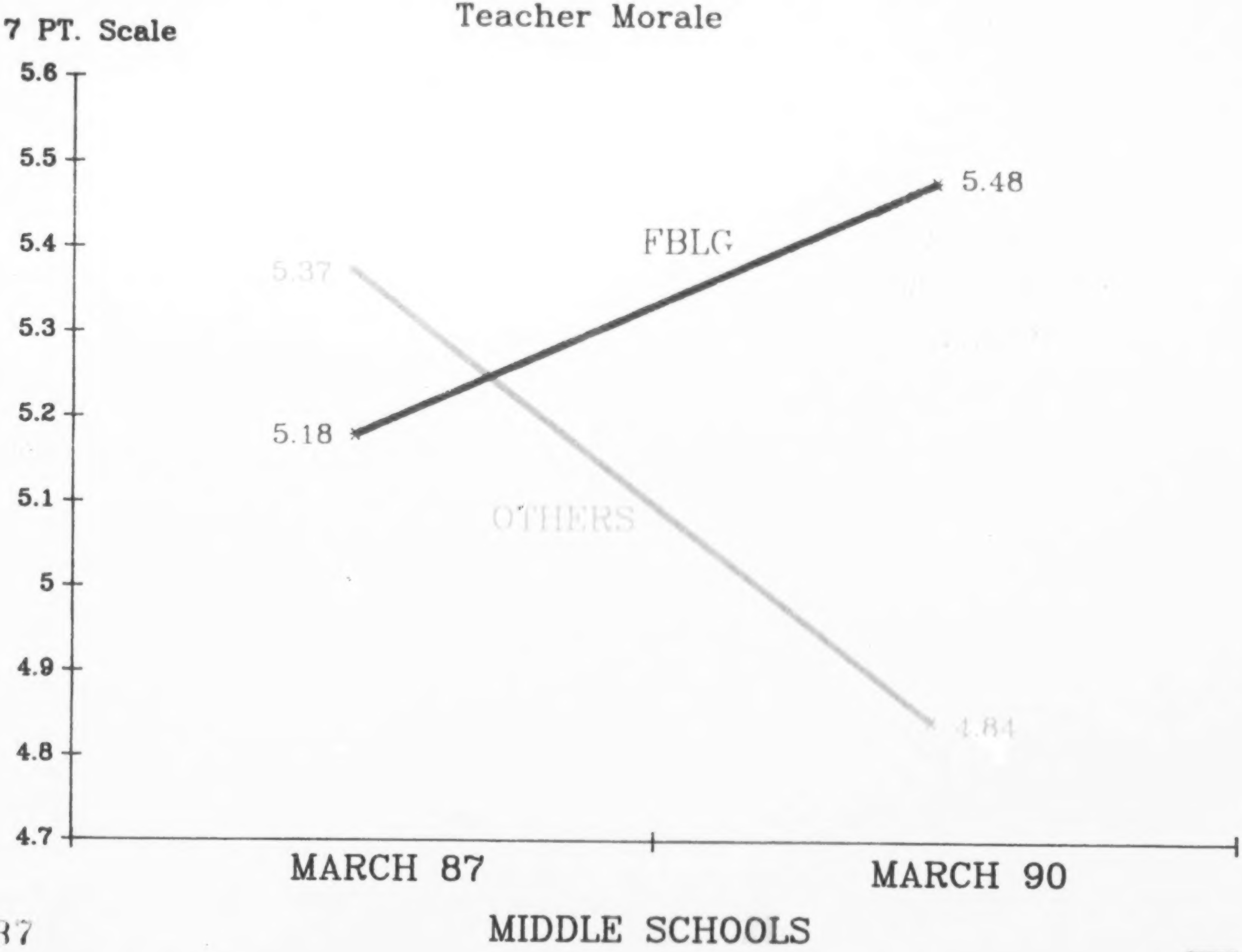
#10 Community Pressures



LRC PT0910

GRAPH 11

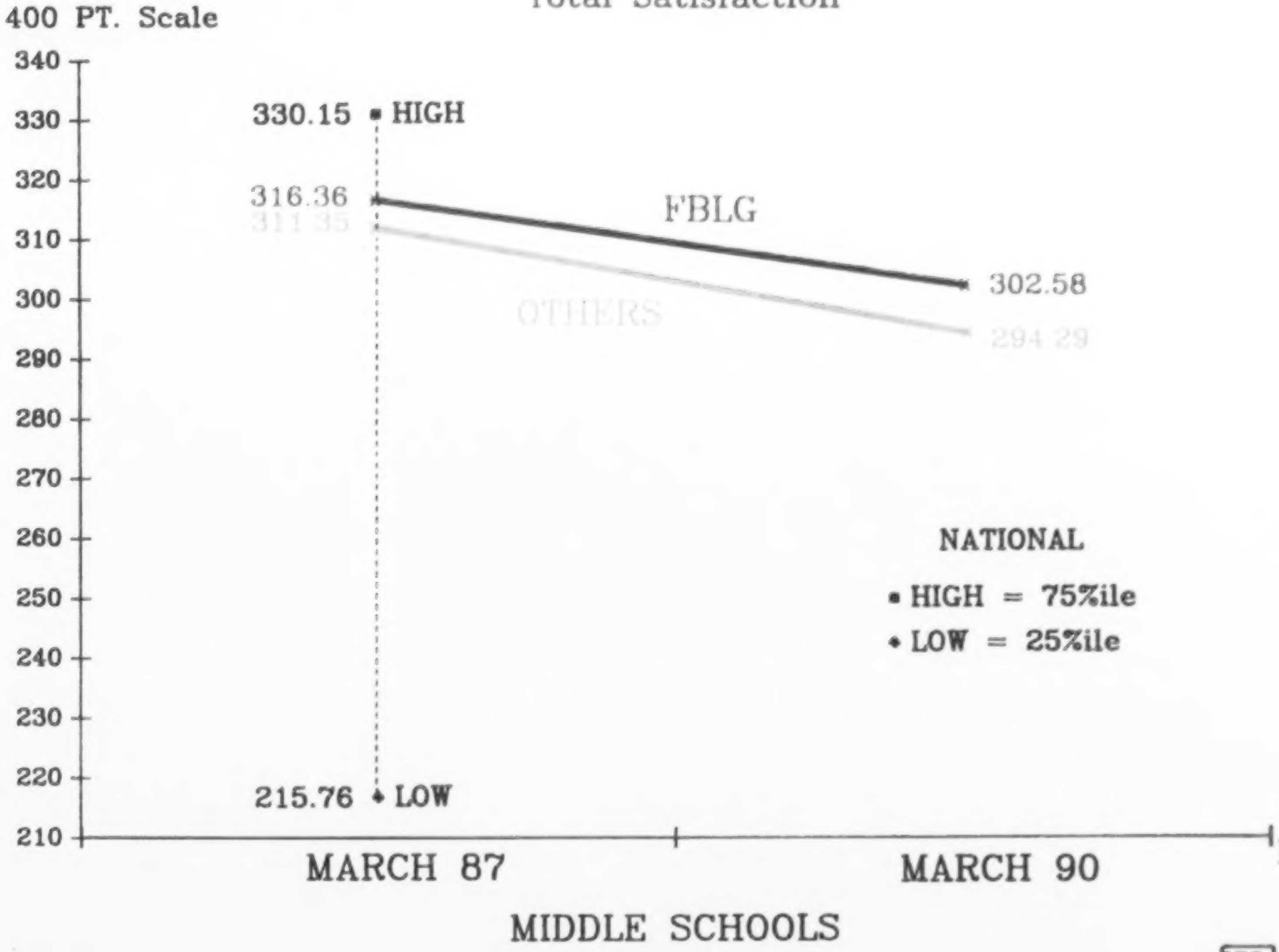
Teacher Morale



E12

GRAPH 12

Total Satisfaction



LRC PT0912

Appendix F

F.B. Leon Guerrero Tables for Determining Posttest Basic Skill Mastery Test Expectancies

The following table presents predicted BSMT posttest skill mastery expectancies:

[illegible]	Posttest [illegible]			
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1	3	8	4	4
2	5	9	5	5
3	7	10	7	6
4	8	12	8	7
5	9	13	9	8
6	11	14	10	9
7	12	15	11	10
8	13	15	12	11
9	14	16	12	12
10	14	17	13	13
11	15	18	14	14
12	16	18	15	15
13	17	19	15	16
14	18	20	16	17
15	18	20	17	18
16	19	21	17	19
17	20	22	18	20
18	20	22	18	21
19	21	23	19	22
20	22	23		23
21	22	24		24
22	23	25		25
23	24			
24	25			
25	25			

References & Notes

1. Association for Supervision and Curriculum Development. ASCD Curriculum Update, November 1988.
2. Carnegie Council on Adolescent Development. Turning Points: Preparing American Youth for the 21st Century. The Report of the Task Force on Education of Young Adolescents, June 1989.
3. Territorial Board of Education policy 351.2 also phased in additional graduation requirements over School Years 1984 and 1985. A student must now earn 23 credits over four years to graduate from high school (December 12, 1983).
4. Pinkham, R., in a memorandum to Director Aguon, identified three objectives of the Facilities Planning Committee and outlined three alternatives for organizing the Guam schools, one of which was the implementation of middle schools, October 26, 1981. Reorganization Committee Files.
5. Pinkham, R., Memorandum to Director of Education regarding Reorganization Plans, October 26, 1981. Attachments included three plans labeled A, B and C.
6. Cawalti, Gordon, Middle schools; a better match with early adolescent needs, ASCD survey finds, ASCD Curriculum Update, November 1988.
7. Alexander, W.M., and Paul S. George. The Exemplary Middle School. New York: Holt, Rinehart, Winston, 1981.
8. Shafer, J., Taton, K., and Lind, E. Guam Public School Reorganization Plan. Agana, Guam: Department of Education, February 1982.
9. Op. site, Guam Public School Reorganization Plan, pp. 10-11.
10. Taton, K., Personnel correspondence between the author and Dr. Keith Taton, former Co-chairperson of the Reorganization Central Planning Committee and first principal of Inarajan Middle School. Dr. Taton was also principal of Inarajan High School during its second year of operation (1983-84).
11. Inarajan High School, on several occasions, has had to combine its football teams with Father Duenas or Oceanview High Schools. High level courses, such as chemistry and physics are sometimes offered only during alternate years.
12. Pacific Daily News, Babauta, S., "New DOE boss an education veteran, January 10, 1983, p. 5.
13. Op cit., Guam Public School Reorganization Plan.
14. Smolar, T. and Shafer, J. Middle School Apraisal, Final Report, Guam Department of Education, Agana, Guam, January 1984.
15. A committee of middle school principals and this author began an exhaustive review of all Board of Education policies in October 1982. This committee was comprised of the late William W. Smith, former principal of Dededo Middle School. Other members included Dr. Keith Taton, Joseph Quitugua (A.I. Johnston), the late Ronald Pinkham (F.B. Leon Guerrero), and the late John Hill (Untalan). This committee identified several policies that needed immediate revision. These included: Policy numbers 315, 339 (Rev. 1984), 345, 348, 351, 405 (Rev. 1983), 430 (Rev. 1988), 445 (Rev. 1988), 710, and Professional Certification (pages 5-6).

16. Agreement between the Territorial Board of Education and the Guam Federation of Teachers Local 1581, AFT, AFL-CIO for Teachers, November 19, 1988.

17. Reichenberger, G. The Effect of an Elementary School Orientation Program on Guam Transfer Students' Behavior, Anxiety and Attitude Towards School, Doctoral dissertation, University of Oregon. Eugene, Oregon, 1987.

18. Bently, R.R., and Rempol, A.M. Manual for the Purdue Teacher Opionnaire. West Layfayette, IN: The University Bookstore, 1967.

19. Mendel, P.C. An investigation of factors that influence Teacher Morale and Satisfaction with Worksite Conditions, Doctoral dissertation, University of Oregon, Eugene, Oregon, 1987.

20. Coopersmith, S. SEI, Self-Esteem Inventories. Consulting Psychologists Press, Inc. Palo Alto, California, 1981, p. 4.